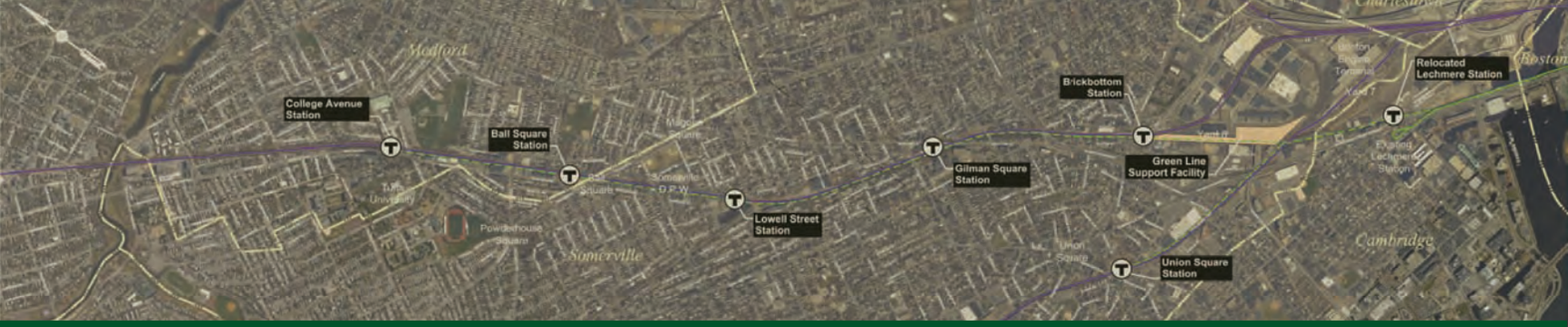

Final Environmental Impact Report

Green Line Extension Project

EEA #13886



Volume 2 | Appendix A - Part 1
Responses to Comments on the DEIR

June 2010

Moving Massachusetts Forward. massDOT

GLX

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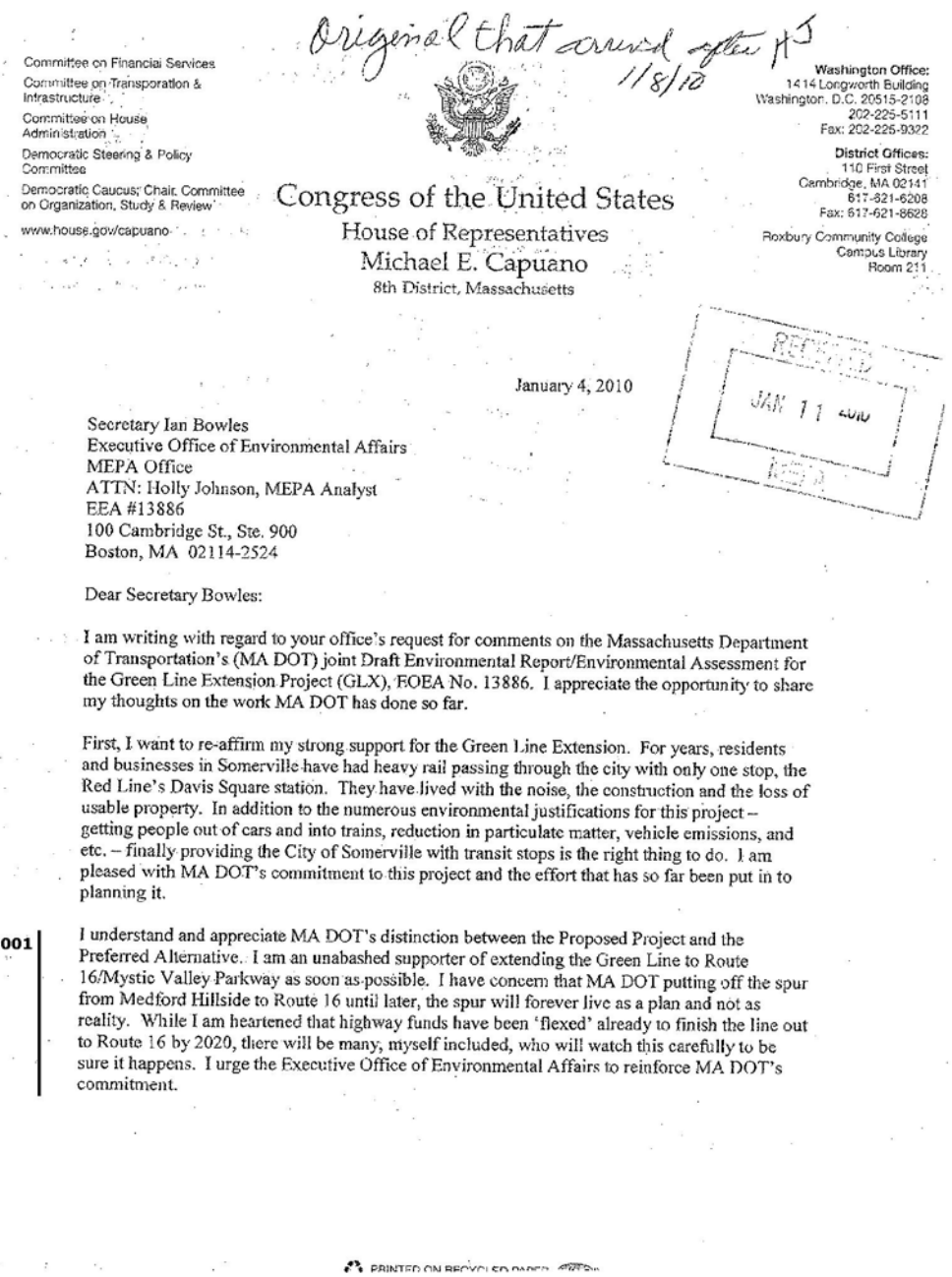

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Democratic Caucus; Chair, Committee on Organization, Study & Review
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Congress of the United States
House of Representatives
Michael E. Capuano
8th District, Massachusetts

Washington Office:
1414 Longworth Building
Washington, D.C. 20515-2108
202-225-5111
Fax: 202-225-9322

District Offices:
110 First Street
Cambridge, MA 02141
617-621-6208
Fax: 617-621-8628

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Secretary Ian Bowles
Executive Office of Environmental Affairs
MEPA Office
ATTN: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Ste. 900
Boston, MA 02114-2524

Dear Secretary Bowles:

I am writing with regard to your office's request for comments on the Massachusetts Department of Transportation's (MA DOT) joint Draft Environmental Report/Environmental Assessment for the Green Line Extension Project (GLX), EOEA No. 13886. I appreciate the opportunity to share my thoughts on the work MA DOT has done so far.

First, I want to re-affirm my strong support for the Green Line Extension. For years, residents and businesses in Somerville have had heavy rail passing through the city with only one stop, the Red Line's Davis Square station. They have lived with the noise, the construction and the loss of usable property. In addition to the numerous environmental justifications for this project – getting people out of cars and into trains, reduction in particulate matter, vehicle emissions, and etc. – finally providing the City of Somerville with transit stops is the right thing to do. I am pleased with MA DOT's commitment to this project and the effort that has so far been put in to planning it.

F-001-001

I understand and appreciate MA DOT's distinction between the Proposed Project and the Preferred Alternative. I am an unabashed supporter of extending the Green Line to Route 16/Mystic Valley Parkway as soon as possible. I have concern that MA DOT putting off the spur from Medford Hillside to Route 16 until later, the spur will forever live as a plan and not as reality. While I am heartened that highway funds have been 'flexed' already to finish the line out to Route 16 by 2020, there will be many, myself included, who will watch this carefully to be sure it happens. I urge the Executive Office of Environmental Affairs to reinforce MA DOT's commitment.

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F-001-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



F-001-002 I commend MA DOT for its commitment to include service to Union Square in the Proposed Project. However, I do not think the Proposed Project goes far enough. The North Station, South Station, Porter Square and Back Bay stations have both subway and commuter rail stops. Union Square, which will have a Green Line station and already has the Fitchburg Line passing through it, should also.

In general, my thoughts and comments for the Proposed Project are entirely supportive. However, there are several issues for which I would like to underscore their importance. The first

F-001-003 is the Somerville Community Path. I appreciate that MA DOT is planning and will construct GLX with the Community Path taken into account. This must continue. Second, I understand

F-001-004 that in constructing GLX, there will be necessary work done on vehicular/pedestrian bridges spanning the right of way. The Commonwealth has an unfortunate history of closing Somerville's bridges and not reopening them for years. MA DOT must not drag its feet this time. Third, I urge that MA DOT be required to look closely at the bus routes in Somerville, with an

F-001-005 eye toward how to best bring bus riders to GLX stations. I believe none of the stations are more than a quarter mile from a bus route. MA DOT ought to consider bringing the buses directly to these rail stops.

F-001-006 As with many of my constituents, my greatest concern is about citing the maintenance and storage facility. I acknowledge the need for a maintenance and storage facility on the north side of the Green Line. I oppose the Preferred Maintenance Facility Site in Yard 8 and understand the problems associate with the alternative I most prefer, the Mirror H plan. That said, I find the Option L alternative to be the least objectionable and I conditionally support it. Option L, while moving the facility as far as possible from residences and as close as possible to the Boston Engine Terminal, must be built to best allow for continued development in the Inner Belt area. The MA DOT should move the Massachusetts Bay Transit Authority (MBTA) offices out of its Cobble Hill area property and into this new facility. The Cobble Hill property could then be sold at market rate to help pay for the storage facility's construction, and replace the taxable property that will be removed from Somerville's tax roll by the facility.

In closing, I would again like to re-state my support for the Green Line Extension. I believe that the Green Line Extension, when completed, will address unment public transit needs and spur economic growth in several Somerville neighborhoods. I appreciate the opportunity to offer my thoughts on how MA DOT should proceed with the Green Line Extension.

Sincerely,

Michael E. Capuano
Member of Congress

F-001-002

Opportunities for a shared station between the Green Line Extension (on the Medford Branch) and MBTA Commuter Rail were evaluated for the Project. This connection was ultimately dismissed, as described in DEIR/EA Section 3.3, and Appendix B. While the potential for a joint station at Union Square would need to be studied further, it is not currently part of the Proposed Project. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain. However, as the Project advances into preliminary engineering, opportunities for future additions and extensions of service will be considered.

F-001-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

F-001-004

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Detailed construction plans will be developed in the next phase of the Project. Affected bridges are described in DEIR/EA Section 3.7.2. Detour routes and emergency access during construction will be developed during preliminary engineering as part of the Traffic Management Plan. At least one bridge will need to be closed during construction (Medford Street). A temporary bridge may be able to maintain a single lane of traffic at the Broadway Bridge. For all other bridges, at least one lane will be maintained during construction. Pedestrian and vehicular access to abutting properties will be maintained at all times. Project bridge designs and construction staging plans will be refined during preliminary

engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during design and construction.

F-001-005

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail. MassDOT will work with the MBTA to evaluate opportunities to improve connections between existing bus routes and proposed stations.

F-001-006

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
http://www.mass.gov/envir

January 15, 2010

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Green Line Extension
PROJECT MUNICIPALITY	: Cambridge, Medford and Somerville
PROJECT WATERSHED	: Boston Harbor
EOEA NUMBER	: 13886
PROJECT PROPONENT	: Massachusetts Department of Transportation (MassDOT)
DATE NOTICED IN MONITOR	: October 26, 2009

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00). However, I am declining to allow this DEIR to be considered the Final Environmental Impact Report (FEIR) (as permitted under 301 CMR 11.08(8)(b)(2)). The Proponent must prepare and submit for review a Final Environmental Impact Report (FEIR) in response to the Scope provided below.

At the outset, I would like to commend the proponent, the Massachusetts Department of Transportation (MassDOT), for its commitment to fund and build this critically important public transportation project. The project is the most significant remaining transit commitment arising out of the Central Artery/Tunnel Project (CA/T) in terms of reducing vehicle emissions and is emblematic of the type of public transportation investment needed to meet the Commonwealth's greenhouse gas reduction mandates. The Green Line Extension Project will finally provide light rail transit beyond Lechmere Station, serving the densely populated communities of Cambridge, Somerville and Medford that today are substantially under-served by public transit. The project is also a reflection of the Commonwealth's public transportation goals and commitment to the principles and practices of sustainable growth. The Commonwealth has committed to a significant

investment in urban mass transit in an effort to provide critical transportation, air quality and urban redevelopment benefits along the project corridor. The project is required by the State Implementation Plan (SIP) and fulfills a longstanding Commonwealth commitment to increase public transit in the greater Boston area. It will reduce regional emissions of nitrous oxides (NO_X) volatile organic compounds (VOCs), the chief precursors of smog, and of carbon dioxide (CO_2), the principal greenhouse gas responsible for global warming. The project also provides opportunity for new public and private investments to revitalize the social and environmental fabric of the corridor.

This project has received significant public input including hundreds of comment letters representing a range of views about numerous aspects of the project. I have received comment letters from elected officials and municipal representatives including U.S. Representative Capuano, Senator Jehlen, Representative Provost, Representative Sciortino, Representative Toomey, Medford Mayor McGlynn, Somerville Mayor Curtatone and the City of Cambridge. I have received comments from multiple city, State and regional agencies, from environmental, bicycle and pedestrian advocacy groups, from neighborhood groups, from groups that represent the disabled and environmental justice populations, and from businesses and residents.

The extension of any light rail service through an urban corridor such as Cambridge, Somerville and Medford is a challenging task and the range of views expressed in the comment letters reflect this challenge. I will note however, that despite the variety of comments received, comment letters generally expressed overall support in expanding light rail along the corridor. Expansion of light rail service is a unique opportunity for the region and I appreciate the time, effort, and thoughtfulness exhibited by residents of the Commonwealth through their ongoing attendance at public meetings and preparation of comment letters for consideration during the MEPA process. I anticipate that participation in these types of forums for the project will continue to be strong as the project proceeds to design and construction.

Comments on the DEIR reflect a unified desire to protect and enhance the character and vitality of this corridor and its neighborhoods and business centers. However, recommendations for how the project can achieve these goals most successfully vary widely among project constituents. The MEPA process has provided a valuable forum for the collection of all relevant points of view, but reconciling all of the identified (and sometimes competing) concerns is beyond the scope of the MEPA. The MEPA process occurs early in the design process to identify key environmental concerns and challenges associated with a project and therefore necessarily takes place in advance of final project design. It does not generally address issues commensurate with those often reviewed at the local site plan review or zoning board review levels within each municipality. Resolution of the final project planning details will therefore fall primarily to MassDOT, the affected communities, and to the various project stakeholders who I expect will continue to be actively engaged in this project going forward.

MEPA is also not a zoning process, and it does not proscribe to a Proponent what, where or how a project should be designed or built. MEPA review is limited by statute to those aspects of the project that may cause Damage to the Environment as defined in the MEPA regulations. I note that many of the environmental issues traditionally associated with expanded transit service are minimized in the current project by using an existing right-of-way (ROW); however, there are

many environmental impacts associated with the project that remain squarely within the scope of MEPA. For example, although the use of existing ROW dramatically decreases certain environmental impacts, this ROW will be altered both physically and operationally due to increased service and these impacts will need to be mitigated. Similarly, air quality and transportation impacts are at the heart of the proposed project, and are therefore a primary area of concern under MEPA. Thus, while many of the issues identified in comment letters are beyond the scope of review under MEPA, my decision today ensures that the environmental impacts of the proposed project have been thoroughly considered.

As set forth in greater detail herein, I acknowledge the continued concerns raised by many commenters regarding: the siting of the project's maintenance and vehicle storage facility (Maintenance Facility); the details of MassDOT's two-phased plan to provide service the Mystic Valley Parkway/Route 16 area; integration of stations into the neighborhood landscape; establishment of a robust public participation process during the final design and construction phase; and commitments to various environmental and construction period mitigation measures (notably noise and vibration mitigation). In order to address these concerns to the greatest extent possible and to ensure that the project adequately and properly complies with MEPA, I have provided a limited Scope for a FEIR below. The FEIR Scope requires MassDOT to further evaluate alternative locations for the Maintenance Facility in order to address the widespread opposition to the DEIR's preferred location at Yard 8. Specifically, MassDOT will be required to provide additional quantitative assessment of the environmental and operational impacts associated with the alternative Maintenance Facility locations under consideration (known as "Option L" and "Mirror H"). The Scope also requires MassDOT to provide further clarification concerning its air quality modeling assumptions, to clarify and confirm impacts associated with the College Avenue Station operating as a terminus station, and to explore ways to improve integration of the Lechmere Station into the surrounding neighborhood.

In order for this project to reach its maximum potential, MassDOT must continue to, and in some ways enhance or expand, project design and coordination efforts in a collaborative manner with State and city agencies, citizens, local businesses, and other stakeholders during all aspects of the project – planning, design and construction. The FEIR will therefore also need to present a Public Involvement Plan to facilitate robust community participation beyond the conclusion of the MEPA process. Once a comprehensive plan has been developed, I am confident that MassDOT can and will address those issues that are beyond the scope of MEPA responsibly and thoroughly. I note that as project design advances, the Massachusetts Bay Transportation Authority (MBTA) will become the lead agency on the project and will ultimately be responsible for the construction and operation of the service. MassDOT and the MBTA must forge a collaborative relationship and make a strong commitment to continuing civic engagement opportunities during the design process as well as a transparent public information and outreach process once construction commences.

Project Description

As described in the DEIR, the project consists of the extension of Green Line light rail service from a relocated Lechmere Station through Cambridge, Somerville, and Medford. The "proposed project" (Alternative 1) in the DEIR includes:

- The Medford Branch - Extending Green Line service to Medford within the existing MBTA Lowell Line commuter railroad ROW, from a newly relocated Lechmere Station terminating at Medford Hillside in the vicinity of College Avenue with intermediate stations at Brickbottom, Lowell Street, Gilman Square, and Ball Square;
- The Union Square Branch – Extending Green Line Service to Union Square in Somerville, within the existing MBTA Fitchburg Line commuter rail ROW, with a station at Union Square.

Given the fiscal constraints that have been introduced since the commencement of MEPA review, MassDOT has proposed constructing the Green Line Extension project in two phases. The DEIR therefore also included an analysis of an extension of the Medford Branch to Mystic Valley Parkway/Route 16, with no parking at Mystic Valley Parkway/Route 16 Station, and extension of the Union Square Branch to Union Square (using commuter rail ROW) (Alternative 2). The DEIR states that while this alternative also meets all of the stated project goals and provides additional regional benefits with regard to air quality and increased ridership, fiscal constraints prevent MassDOT from committing to this alternative within the 2014 timeframe mandated by the SIP. The DEIR indicated that 'flex funding' allocated by the Boston Area Metropolitan Planning Organization may be available sometime between 2016 and 2020 to assist in funding the construction of the Green Line Medford Hillside to Mystic Valley Parkway/Route 16 segment. MassDOT proposes to construct Alternative 1 as the first phase of the project and Alternative 2 as the second.

The majority of anticipated environmental impacts along the corridor for both phases are largely similar, with the exception of additional impacts introduced in Alternative 2 with the extension of the project beyond Medford Hillside to Mystic Valley Parkway/Route 16. As it is not anticipated that construction of the Medford Hillside to Mystic Valley Parkway/Route 16 segment will commence within the applicable MEPA or NEPA timeframes, reassessment of Alternative 2 will be required in the form of a Notice of Project Change (NPC). I expect that this NPC would present additional (and updated) information on the potential environmental impacts of this segment for review by interested parties, as the DEIR presented a 'worst case scenario' of possible environmental impacts based on currently available conceptual designs. This NPC will be required to address how this portion of the project avoids, minimizes, and mitigates Damage to the Environment as directed by the MEPA regulations and present additional station design alternatives and existing and proposed conditions data on potential environmental impacts along this section of the corridor. I encourage MassDOT to consider the thoughtful comments and design suggestions submitted in response to the DEIR when preparing the NPC.

The project corridor passes through a wide cross-section of land uses: industrial, commercial, institutional, and residential. The project will provide access to a dense population of potential and existing transit riders currently serviced primarily by bus service along 15

established routes. Several of the station locations provide unique opportunities for transit-oriented redevelopment, potentially spurring economic development within the corridor. The corridor lends itself well to increasing the multi-modal transportation experience, with connections to the existing street and neighborhood network, as well as the conceptually designed Community Path (described in further detail below).

The proposed project includes the construction of new tracks and stations, relocation of existing commuter rail tracks, potential relocation, removal and/or elimination of freight tracks, reconstruction of bridges, construction of a new Maintenance Facility, construction of retaining walls, and the construction of traffic, pedestrian and bicycle improvements along the project corridor. The DEIR stated that the project is expected to increase the MBTA's anticipated daily ridership at the project's seven stations (boardings and alightings) by approximately 52,000 by 2030, with approximately 90% of these trips to take place in the project's opening year of 2014. The DEIR estimates that Alternative 1 will generate new systemwide transit ridership of 7,900 boardings per day and a reduction of 25,018 vehicle miles traveled (VMT) per day (projected to the year 2030). The project cost for Alternative 1 is estimated at $804.8 million (in 2008 dollars) and includes the $76 million cost estimate for purchase of additional vehicles.

Procedural History

The Expanded Environmental Notification Form (EENF) was submitted for MEPA review and noticed in the Environmental Monitor on October 10, 2006. On December 1, 2006, Secretary Golledge issued a Certificate on the EENF outlining the scope for the DEIR.

As part of the EENF, MassDOT requested in accordance with 301 CMR 11.05(7) that it fulfill its EIR obligations under MEPA with a Single EIR, rather than the usual process of a Draft and Final EIR. The Secretary declined to grant this request for reasons discussed in the Certificate on the EENF. The DEIR received an extended comment period of 75 days, commencing on October 26, 2009 and concluding on January 8, 2010. On December 9, 2009, MassDOT issued supplemental information regarding the potential location of the Green Line vehicle storage and maintenance facility (Maintenance Facility), presenting a qualitative analysis of two additional Maintenance Facility sites (Mirror H and Option L) beyond the preferred alternative presented in the DEIR.

Within the DEIR, MassDOT requested that the DEIR be considered as the FEIR in accordance with 301 CMR 11.08(8)(b)(2). I have determined that while the DEIR is generally responsive to the requirements of 301 CMR 11.07 and the Scope, the ongoing evaluation of maintenance facility siting alternatives, the need for additional discussion of impacts at College Avenue and Lechmere Stations, and a requirement for clarification of the future mitigation and community participation commitments, preclude me from exercising my rights to declare that the DEIR will be considered an FEIR.

Project Permitting and Jurisdiction

The project is subject to review and mandatory preparation of an EIR pursuant to Sections 11.03 (1)(a)(1) and (6)(a)(5) of the MEPA regulations because it will require a State permit and will alter more than 50 acres of land and consists of a new rail or rapid transit line along a new, unused or abandoned right-of-way for transportation of passengers or freight. The project will require Access Permits from MassDOT. The project will require an 8(m) Permit from the Massachusetts Water Resources Authority (MWRA). It will require a Determination of Effect to Historic or Archaeological Resources (Section 106 of the National Historic Preservation Act) and a Section 4(f) Determination by the Federal Transit Administration (FTA). It will require review by the Massachusetts Historical Commission (MHC). Also, it will require a National Pollutant Discharge Elimination System (NPDES) industrial permit and a Multi-Sector General Permit for Stormwater Discharges Associated with an Industrial Activity (MSGP) from the United States Environmental Protection Agency (U.S. EPA).

Because the proponent is a State Agency and will use State funding, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

It should be noted that the project will also review under the National Environmental Policy Act (NEPA) because MassDOT is seeking federal funding for the project. The DEIR also serves as the Environmental Assessment (EA) in accordance with NEPA. MassDOT has indicated in the DEIR that because the proposed project would be primarily located within the existing active commuter rail ROW and would be beneficial to communities, it anticipates that the FTA will issue a Finding of No Significant Impact (FONSI) at the conclusion of the NEPA process.

Review of the DEIR

General

The DEIR provided a response to the Secretary's Certificate on the EENF and included additional information as necessary to respond to the Scope and respond to comments received on the EENF.

Project Description and Permitting

The DEIR provided a detailed description of the proposed project and each alternative, indentifying an anticipated project schedule, project costs and funding sources. The DEIR contained a substantial number of existing and proposed conditions plans and graphics to support the report narrative. Conceptual station and maintenance facility plans were included in the DEIR to illustrate project context and identify general circulation plans for motor vehicles, buses, pedestrians, and cyclists to each station location.

The DEIR discussed proposed track modifications, station locations, bridge replacements, and proposed operating plans and requirements for each project alternative. The DEIR identified

the need for new or modified electrical systems or support structures, including extended catenary lines and new signals, for each alternative. As noted later in this document, the DEIR and supplemental review materials described the proposed location, operations, and components of the Maintenance Facility at Yard 8, as well as a qualitative review of the potential Mirror H and Option L locations. The DEIR contained a list of required permits and approvals, the status of each permit and/or approval, and a discussion of project consistency with federal, State and local planning.

Smart Growth/Land Use

An overall policy goal of the Commonwealth is to direct public infrastructure investments to spur revitalization of previously developed urban sites over undeveloped greenfield sites. This project provides an opportunity to achieve this goal and must be actively pursued through ongoing collaboration between MassDOT and the affected communities. The success of this project continues to be dependent not only on MassDOT's ability to plan effectively, but the ability of Cambridge, Medford and Somerville to respond with appropriate zoning changes and complementary regulations. MassDOT should work with these communities to coordinate land use planning activities and new transit operations.

If this project is designed with the proactive participation of communities and on a foundation of solid and innovative land-use planning, it has the opportunity to maximize economic development and long-term ridership potential. As discussed later in this Certificate, MassDOT must continue to engage interested parties in the form of a Citizens Advisory Group (CAG) which should include representatives of regional planning agencies, local government, business interests, community groups, representatives of environmental justice areas and the disabled community, abutters, and bicyclist and pedestrian groups.

The DEIR characterized existing land uses and provided population, housing density, and employment density data within a ½-mile radius of each proposed station site. The DEIR also described recent land use plans, studies, and design guidelines that may affect development near proposed station sites in each community. Proposed transportation projects that may have potential impacts on the Green Line Extension project were also discussed in the DEIR, noting their relationship to the expansion of light rail. The DEIR summarized direct land use impacts for each alternative, in the form of full or partial land takings.

The DEIR included data on current socioeconomic conditions in Cambridge, Somerville and Medford based upon available U.S. Census data, focusing on employment and income in each city. The DEIR characterized general socioeconomic conditions for each affected community along the project corridor. To evaluate direct socioeconomic impacts, the DEIR evaluated the local impacts of acquisition and demolition of existing homes and businesses for each alternative through loss of property taxes and estimated job displacement or relocations. I note that under Alternative 1, no homes and five businesses will be displaced and I commend the efforts put forth by MassDOT to propose a project that limits property takings to the maximum extent possible.

According to the DEIR, the project is expected to decrease low intensity commercial and light industrial uses in the project corridor and increase mixed-use, high-density transit-oriented

development, particularly in Union Square, and at Brickbottom and Lechmere Stations. The DEIR concluded that the project would provide socioeconomic benefits due to increased transit access, which increases both the potential for local commerce and the potential for area residents to commute to jobs elsewhere. The DEIR conceded that the precise economic benefit of increased transit access cannot be quantified based on existing data.

In accordance with federal and MEPA regulations, the DEIR included an assessment of short-term and long-term impacts and cumulative impacts of the project, any other projects, and other work or activity in the immediate surroundings and region (301 CMR 11.07). I acknowledge the difficulty in predicting future growth patterns and development pace, as future development will be greatly influenced by factors outside the control of MassDOT. This assessment described indirect effects as those effects resulting from possible redistribution of growth and changes in development densities. Federal guidance was used to evaluate the project's cumulative effects, specifically, CEQ's *Considering Cumulative Effects under the National Environmental Policy Act* (CEQ 1997). The assessment strived to analyze cumulative effects covering both known effects of the past, commencing in 1980, and predict those of the future, between present day and 2030.

The DEIR characterized and discussed corridor-wide indirect effects, noting that the various development alternatives will affect where growth occurs, the form of the growth, and the pace of development. The DEIR discussed potential for transit-oriented development (TOD) at proposed station sites, presented comparative data on impacts to property values, and characterized potential land use impacts within ½ mile radius of station sites. The cumulative impact analysis explored the potential influence of present and reasonably forseeable actions (i.e., background population growth and development projects). Finally, the DEIR included a qualitative discussion of the indirect and cumulative effects of the project, comparing the various project alternatives to a no-build alternative, for several review areas including: land use; traffic and transportation; property values; economy; neighborhoods; environmental justice; and historic, archaeological and cultural resources.

I note that MassDOT has committed to perform land use workshops with affected communities to further identify community needs and issues regarding land use and redevelopment. The data and analysis presented in the DEIR should be used as the foundation for these workshops, driving the discussion on key issues surrounding how to best integrate anticipated changes from the project into the existing community fabric. Information gathered at these workshops could be helpful for community leaders and elected officials in determining how to best revise zoning regulations, affordable housing policies and parking management measures to reflect the anticipated transit-oriented landscape. I urge the communities of Cambridge, Medford and Somerville to take direct action to build on the State's efforts and information in order to facilitate sustainable development and land use to the greatest extent possible.

Consistency and Coordination with Planning and Projects

The DEIR discussed preliminary project coordination, identified key project features and described the Green Line Extension's relationship to proposed regional projects such as: the Urban Ring; reconstruction of Route 28/McGrath Highway; the North Point development and relocation

of Lechmere Station; the Community Path; and the Minuteman to Mystic Valley Parkway Path. I have received several comments requesting MassDOT to redesign and reconstruct the elevated portion of Route 28/McGrath Highway into a boulevard layout. Although this is beyond the scope of the proposed project, it is important that as project design advances, MassDOT accommodate identified future projects into project layout and design, or at a minimum, not preclude their construction. I encourage MassDOT to design the project to facilitate future transit projects such as light rail expansion or connections to existing infrastructure such as Porter Square and the Red Line, the Urban Ring, other commuter rail service expansion, or roadway, bicycle and pedestrian path networks as much as possible.

The Community Path

The intent of the Somerville Community Path (the Community Path) is to extend the Minuteman Bikeway/Linear Park multi-use path from its current terminus at Cedar Street in Somerville to the Charles River Path network in Cambridge and Boston, a distance of approximately 2.5 miles. The proposed route follows the edge of the MBTA Lowell Line ROW, generally located at street level while existing commuter rail trains and proposed light rail trains will run below grade, in a cut section. The DEIR presented ten-percent design plans for the Community Path to demonstrate the feasibility to construct the Community Path alongside the project. The DEIR identified where the Community Path could be accommodated within the ROW, identified potential pinch points and obstacles to including it within the ROW, and recommended solutions in instances where the Community Path could not be accommodated in the ROW (i.e. cantilevering the trail or narrowing the path). The DEIR also evaluated the viability of extending the Community Path to Route 16 to create a connection with the Mystic River Parkway based upon the feasibility of sufficient ROW widths or alternative on-street routes. The results of this study concluded that extending the path to Route 16 is not feasible at this time.

I have received many thoughtful comments received from bicycle and pedestrian advocates, and commenters in general, regarding the unique multi-modal transit opportunities afforded by effectively integrating the Community Path with proposed Green Line stations and overall neighborhood character. The Community Path could provide an additional avenue to access public transit, and thereby enhance and increase ridership potential. MassDOT has committed to the 100-percent design of the Community Path as part of the final design of the Green Line Extension. As station designs are refined, an emphasis should be placed on bicycle access to stations, as well as the provision of adequate bicycle parking. Based upon additional review of the location of the Maintenance Facility, the route of the Community Path through the Inner Belt and Brickbottom areas from Washington Street to Lechmere may become more feasible and should be re-evaluated for integration into project design. Lastly, I strongly encourage MassDOT and the City of Somerville to work together to seek State and federal funding opportunities to facilitate construction of the Community Path concurrently with the project.

Environmental Justice

Cambridge, Somerville, and Medford all have substantial State-defined environmental justice (EJ) areas, classified as areas with substantial foreign-born, minority, or low-income populations. As part of the Certificate on the EENF, I required MassDOT to identify EJ areas and

other sensitive populations, provide relevant socio-economic data, describe how the project is designed to provide fair access to stations and economic development opportunities and avoid any disproportionate share of impacts. The DEIR was generally responsive to this directive, identifying EJ populations along the corridor, describing changes in transit access to EJ and disability populations, tabulating the number of buildings to be acquired within EJ census blocks, estimating project-related job losses, and identifying the number of sensitive receptors affected by noise in EJ areas for each project alternative. The DEIR concluded that according to transit modeling for the project, the Build Alternatives would substantially increase transit access for EJ and disability populations and would thereby provide increased access to jobs, housing, and public services.

In response to the requirement to take affirmative measures to ensure full public participation in the MEPA process by all affected communities, particularly those with a high percentage of minority, low-income, non-English-speakers and the disabled, the DEIR included a summary of the ongoing public involvement and agency coordination process, with a specific discussion of outreach efforts to EJ populations. MassDOT has established a public involvement process that included a Project Advisory Group, open public meetings, and coordination with the staff and elected officials of Cambridge, Somerville, and Medford, as well as other stakeholders along the corridor. MassDOT identified key issues such as ridership modeling, maintenance facility location and operations, station siting, tunnel alignment alternatives, and construction impacts that were discussed during the course of the public involvement process. MassDOT established a Project Advisory Group consisting of municipal officials, community representatives, and other interested individuals to help guide the public process, build consensus, and advise MassDOT on issues of concern. MassDOT also conducted tutorial sessions for Advisory Group members, held general project public meetings, and station workshops. MassDOT created a project website that acts as a portal to access project documents, studies, and meeting minutes.

Alternatives Analysis

The DEIR included a discussion of a total of eight (8) project alternatives. The alternatives analysis evaluated the following scenarios:

- No Build – existing transportation facilities and services and all future committed transportation improvements projects without the extension of the Green Line;
- Baseline – No-Build conditions plus enhanced MBTA Route 80 bus service between Lechmere Station and Mystic Valley Parkway/Route 16 and shuttle service between Lechmere Station and Union Square;
- Alternative 1 – Green Line Extension to Medford Hillside and Union Square (via commuter rail ROWs);
- Alternative 2 – Green Line Extension to Mystic Valley Parkway/Route 16 and Union Square (via commuter rail ROWs);
- Alternative 3 – Green Line Extension to Medford Hillside (via commuter rail ROW) and Union Square (in-street running);
- Alternative 4 – Green Line Extension to Mystic Valley Parkway/Route 16 (via commuter rail ROW) and Union Square (in-street running);

- Alternative 5 – Green Line Extension to Mystic Valley Parkway/Route 16 (via commuter rail ROW); and
- Alternative 6 – Green Line Extension to Union Square (via commuter rail ROW).

The alternatives presented in the DEIR were a result of years of study, creation of planning documents, work with State Agencies and advisory groups, and operational and design criteria requirements. The selection of Alternative 1, and Alternative 2 at a later date, were based on consideration of ridership, project costs, and community impacts. For each alternative, the DEIR described proposed operations, station locations, vehicle equipment requirements, anticipated new transit boardings and VMT reductions, estimated travel times, headways, fares, capital improvement requirements, and conceptual capital and operating and maintenance costs. The DEIR also provided data on noise, vibration, air quality, traffic, land acquisition, stormwater, historic and archaeological assets, hazardous materials and EJ population impacts for each project alternative for comparative purposes.

As directed in the Certificate on the EENF, the DEIR evaluated extending the project to Mystic Valley Parkway/Route 16. As I noted earlier, this project element, although part of MassDOT's "Preferred Alternative" (Alternative 2), is not being pursued at this time due to budgeting constraints and will be required to be reevaluated as part of an NPC review with the MEPA office.

Additionally, the DEIR evaluated design alternatives (Alternatives 3 and 4) that would bring light rail service closer to Union Square by diverting from the Fitchburg commuter rail ROW to an in-street running single-loop corridor. Alternatives 3 and 4 would result in increased construction costs due to roadway and bridge reconstruction and reconfiguration and would present challenges to extending service beyond Union Square in the future. Therefore the DEIR concluded that Alternative 1 provided a better balance of cost, ridership and environmental impacts than an option that included an in-street running of the Union Square branch.

Finally, the Certificate on the EENF requested that the DEIR explore alternatives that could provide a connection between light rail and commuter rail service including a new commuter rail stop at Tufts University or Gilman Square. Studies and conceptual design plans prepared in coordination with the DEIR concluded that to meet accessibility design requirements and maintain commuter rail, light rail and freight service along this portion of the ROW an additional track for freight service would be necessary, thereby increasing environmental impacts at either the College Avenue or Gilman Square Stations. MassDOT has therefore dismissed introduction of a commuter rail link along the Green Line Extension as a viable option at this time. The existing connection between the Green Line and the Lowell Commuter Rail Line will remain at North Station in Boston. Although not evaluated in the DEIR because it was not part of the Scope for that document, I note Congressman Capuano's recent comments regarding the possibility of providing commuter rail service at Union Square and ask that MassDOT consider whether such a measure would be possible in the future. While there may be similar challenges to integrating the commuter rail, freight and light rail networks in this area, MassDOT should consider possibilities for expansion of commuter rail service in the area during its ongoing transit planning efforts.

Maintenance Facility

The DEIR indicated that the capacity of the MBTA's Green Line system is constrained by the need for layover and maintenance facilities. Under existing conditions, there are no maintenance facilities located on the north side of the transit system in proximity to the proposed Green Line Extension. The preferred location for the Maintenance Facility presented in the DEIR is at a location known as Yard 8 with Adjacent Parcel (or simply, Yard 8), located in the Innerbelt/Brickbottom area of Somerville. The DEIR provided a general discussion of purpose and need for the facility, siting and program criteria, previous evaluations of potential facility locations, and a discussion of use of the MBTA Boston Engine Terminal (BET) Commuter Rail Maintenance Facility site in lieu of Yard 8.

During the public comment period on the DEIR, MassDOT issued a supplemental technical memorandum entitled, *Green Line Extension Project – Additional Maintenance Facility Alternatives Analysis*, dated December 9, 2009. This memorandum contained a preliminary analysis of two additional Maintenance Facility locations, the so-called "Mirror H" and "Option L" sites, and qualitatively compared them to Yard 8. The Mirror H site, proposed by the City of Somerville, straddles the InnerBelt area of Somerville and the North Point area of Cambridge. Option L, conceived by MassDOT, is located immediately adjacent to the MBTA's Commuter Rail Maintenance Facility at BET. The technical memorandum outlined the Maintenance Facility program and requirements (developed in consultation with MBTA operations and vehicle maintenance staff), provided a brief discussion of system operational impacts associated with each location, and qualitatively evaluated each location with regard to a set of evaluation criteria. Evaluation criteria included: ability to meet MBTA program requirements; cost; property impacts; operation impacts to the Green Line Extension and railroads; compatibility with other transportation proposals in the project area; compatibility with existing land use planning; future economic development opportunities; ability to meet project schedule; natural, physical, and social/cultural impacts to neighborhoods; and future vision transportation access.

Both MassDOT and I acknowledge the broad-sweeping opposition from elected representatives, municipal officials, and abutting residences and businesses to locating the Maintenance Facility at Yard 8. Concerns range from noise, vibration and air quality impacts, to potential reduction of economic development potential in the area, and the equitable distribution of transit system impacts. Therefore, as part of the FEIR, MassDOT will be required to provide an expanded analysis of potential Maintenance Facility locations as further outlined later in this Certificate.

Impacts to Land/Stormwater

The DEIR indicated that impacts to land were minimized through the placement of the project primarily within the existing MBTA Lowell Line and Fitchburg Line ROWs, avoiding larger acquisitions of buildings or open space. The DEIR identified anticipated land acquisition parcels (and therefore areas of land alteration) along the corridor, the cause of impact to each parcel, the acquisition area, and whether the parcels would be acquired partially or in full. Alternative 1 is estimated to require the acquisition of 10.1 acres of land along the Medford Branch and 1.4 acres of land along the Union Square Branch. The DEIR also calculated the

anticipated increase in impervious surfaces along the project corridor for each alternative. Alternative 1 will result in a total of 6.8 acres of new impervious area associated with the Medford Branch, Union Square Branch and Maintenance Facility.

The existing ROW ranges from 55 to 110 feet in width. The project will not alter any wetlands although the ROW will be modified significantly and vegetated banks will be replaced with retaining walls in some locations. Proposed retaining walls will include a "green" design component, which means that efforts will be made to use recycled or recyclable materials and to incorporate vegetation as part of the wall system. Landscape treatments will also be proposed on the slopes above the walls and to the greatest extent practicable at each station. Estimated amounts of earthwork could not be determined at this time based upon the level of design. Temporary land takings to facilitate the construction process may also be required and should be determined as planning and design advance. The MassDOT has committed that as the project progresses through preliminary engineering and final design to refine project designs to further minimize temporary and permanent property acquisitions (via reductions in earthwork, land alteration, etc.) to have the least possible impact on local neighborhood and property owners.

The DEIR included an overall conceptual drainage plan, identifying the major connection points to the existing stormwater system and anticipated stormwater management measures. The DEIR indicated that a Stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction. MassDOT has committed to preparing a detailed long-term operations and maintenance plan for the stormwater management system. MassDEP has made several recommendations regarding station area and maintenance facility stormwater drainage design, which I encourage MassDOT to consider as design plans advance. I remind MassDOT that the project will contribute flows to existing stormwater discharges to Category 5 impaired waterbodies (Mystic and Charles Rivers) and stormwater management systems should be designed to address any applicable Total Maximum Daily Load (TMDL) requirements. MassDOT has committed to designing the drainage system to meet the MassDEP Stormwater Standards to the extent practical. The project will be required to achieve requisite NPDES permit obligations, including MS4 requirements to implement construction site runoff controls, post-construction runoff controls, and pollution prevention/good housekeeping measures.

Station Design and Locations

The DEIR proposed specific station locations selected based upon siting criteria consisting of, but not limited to, station access (including to identified EJ populations), transit operations and ridership goals, land use compatibility, and costs. Station locations and general design were also based upon input from the public at station workshops, and from public officials and federal and State code requirements on accessibility, level of service (LOS), passenger circulation, and safety requirements. None of the new station locations in Alternative 1 have park-and-ride facilities and therefore the ridership market or these stations are almost wholly defined as persons capable of accessing the station by non-vehicular means. Walk-access transit catchment areas of a one-mile radius were evaluated based on FTA's requirements.

The DEIR included a discussion of the feasibility and advisability of location stations a Winthrop Street in Medford, and a location between Winthrop Street and College Avenue.

MassDOT evaluated both the physical environmental impacts stations at these locations may impose, but also the ridership market potential given the project and the Preferred Alternative. MassDOT concluded that based on their understanding of the ridership market, the Winthrop Street area could best be served by the proposed College Avenue Station and the future Mystic Valley Parkway/Route 16 station, while minimizing the impacts on area residents.

I acknowledge the MBTA comment letter which indicates that efforts will be made to properly size stations to limit overall environmental impacts. The MBTA has indicated that all stations will meet Americans with Disabilities Act (ADA), Massachusetts Architectural Access Board (MAAB) standards and the MBTA's settlement agreement with the Boston Center for Independent Living (BCIL); meet the applicable National Fire Protection Association (NFPA) standards; and be designed and built to be the most efficient and sustainable stations possible that function well and are integrated into the community.

The DEIR provided conceptual layout design plans and cross-section renderings of the stations that generally identified platform locations, access points, circulation patterns, bicycle storage areas, proximity to bus stops and crosswalks, and payment turnstiles. According to the DEIR, each station is envisioned to provide: a headhouse as a shelter for paid and unpaid lobbies with automated fare lines; vending machines; an information booth; and restrooms. Stations will also include: landscaping; bike racks; MBTA direction and spider maps; uniformly lit station platforms; tactile/Braille Station identification signs; and trash receptacles. Due to steep grade changes along the project route, many station platforms will be located at a different elevation than station access points. Entry to and exit from the platforms will be provided by elevators, escalators, and stairs. Finally, MassDOT has proposed a variety of "green" design elements to be incorporated into station design including high performance lighting, recycling stations, recycled content site and building materials as practicable, water efficiency measures, and where possible, maximization of building energy performance and implementation of an indoor air quality management plan.

As MassDOT refines project design plans, I encourage it to consider the many thoughtful comments I have received regarding station design, neighborhood integration, and station access. I note comments related to facilitating bus route/light rail station connections with bus pull-out areas, the potential advantages (or disadvantages) of kiss and ride drop offs, and bus route modifications to better integrate light rail stations with bus stops. As part of the Advisory Group process, station design issues germane to specific station locations, neighborhoods, and ridership needs should be collaboratively explored.

Air Quality

The DEIR included a mesoscale analysis to estimate area-wide emissions of VOCs, NOx, CO_2, carbon monoxide (CO), and particulate matter (PM_{10}). The mesoscale analysis evaluated the changes in emissions levels based upon changes in the average daily traffic volumes, roadway lengths, and vehicle emissions rates. An evaluation of air toxics was also conducted. The DEIR also included a microscale analysis of CO, PM_{10} and $PM_{2.5}$ emissions. The microscale analysis estimated project related emission based on traffic and emissions data including, traffic volumes, VMT, signal cycle timing, physical roadway improvements, years of analysis and roadway speeds.

MassDOT consulted with MassDEP prior to conducting the analysis to develop appropriate modeling protocols. The air quality analysis compared the 2007 No-Build conditions with 2030 Build conditions, analyzing area-wide VMT reductions based upon new ridership projections for each alternative. The DEIR concluded that by 2030, ridership for Alternative 1 will generate 7,900 new transit trips per day, resulting in an area-wide reduction in daily VMT of 25,018.

In support of the air quality analysis, the DEIR included a discussion of the study methodology, National Ambient Air Quality Standards (NAAQS), and summary data for both the microscale and mesoscale studies for each alternative. The DEIR concluded that the 1-hour and 8-hour CO concentrations are below the CO NAAQS, the 24-hour PM_{10} concentrations are below the PM_{10} NAAQS, and the 24-hour $PM_{2.5}$ concentrations are below the $PM_{2.5}$ NAAQS. The DEIR also evaluated the potential $PM_{2.5}$ air quality impacts associated with the relocation of the existing commuter rail tracks. While $PM_{2.5}$ emissions will increase at both the nearest property line and residential building, the annual and 24-hour $PM_{2.5}$ concentrations will remain below the NAAQS standards. The DEIR mesoscale analysis results indicate that Alternative 1 will result in an area wide emissions decrease of 17,115 kilograms per day (kg/day) for CO_2, 7.6 kg/day for VOCs, 4.4 kg/day for NOx, and 0.8 kg/day for PM_{10} when compared to the 2030 No Build condition.

The DEIR described the air quality benefits associated with this project and described its consistency with the State Implementation Plan (SIP) and MassDEP's Transit Regulations. The construction of the Green Line Extension from Lechmere Station to Medford Hillside and the construction of the Union Square spur of the Green Line before December 31, 2014 are codified in MassDEP's Transit System Improvement Regulations (310 CMR 7.36). These regulations do not include a specific geographic terminus of the Green Line within the Medford Hillside neighborhood. MassDOT has presented air quality data in the DEIR that, as confirmed by the comments submitted by MassDEP, are consistent with and meet the emission reduction requirements required under 310 CMR 7.36(8), *Determination of Air Quality Emission Reductions."* These requirements are also part SIP, which was approved in 2008 by the U.S. EPA.

I note comments received from the Conservation Law Foundation (CLF) indicating its belief that MassDOT has not demonstrated consistency with the SIP due to perceived errors in the air quality modeling methodology. After consulting with MassDEP and MassDOT, I respectfully disagree with this assertion. Transportation modeling is inherently fluid and dynamic; data inputs and modeling refinements are constantly integrated into updated modeling runs with an end goal of providing the most accurate and up to date predictions of actual transportation impacts possible. In acknowledgement of the anticipated evolution of modeling techniques and data inputs, the SIP provides a provision (310 CMR 7.36(9)) whereby upon substantial completion of a project, MassDOT shall complete an analysis of the total air quality benefits of such projects and such analysis shall be performed in accordance with U.S. EPA requirements in effect at the time of the analysis. Thus, the predictive modeling provided at this stage of project development is back-stopped by the use of actual data upon substantial completion of the project. This provides further support for the understanding that air quality data evolves over time through the use of updated modeling assumptions. However, I acknowledge that the air quality modeling methodology can be difficult for the average project reviewer to understand without the benefit of direct access to modeling experts. Therefore, as noted later in this Certificate, I have required MassDOT to

provide a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for SIP consistency as part of the FEIR.

Transit Ridership

The DEIR estimated ridership methodologies, associated reductions in VMT (based on both new and diverted trips), operating parameters, vehicle requirements, headways, and travel times for each alternative. The model developed to calculate ridership provides projections for a forecast year of 2030 and assumes that a number of proposed transportation projects, including segments of the Urban Ring project Phase II and Silver Line Phase III projects and other area highway transportation projects consistent with the Regional Transportation Plan, will be implemented by this time. Operating plans were developed as an extension of the existing Green Line D and E Branch services, so as to minimize impact to the Central Subway system operations. Analyses conducted by the Central Transportation Planning Staff (CTPS) have concluded that all segments of the Green Line branches are capable of accommodating the peak transit loads in both the AM and PM peak hours and will not exceed the MBTA's maximum load service policy. The project does not propose to reduce bus service or bus operations within the service area. As requested by commenters, I encourage MassDOT to evaluate how existing bus service within the service area may be modified to provide improved or direct access to proposed light-rail stations in an effort to maximize ridership. This topic should be explored further in the context of the Advisory Group process. Construction activities should be structured to avoid or minimize any delays in service along the Lowell or Fitchburg commuter rail lines.

Traffic and Transportation

The DEIR analyzed existing and proposed conditions at a series of project area intersections selected subsequent to input from MassDOT, CTPS, MEPA, the City of Cambridge, the City of Somerville, and the City of Medford. The proposed 2030 traffic volume networks were developed by CTPS using its regional travel demand model and the model was run for each alternative at each selected project area intersection.

The DEIR analyzed traffic for existing, build and no-build conditions to evaluate the implications of the project for intersection LOS, pedestrian and bicycle circulation, intersection safety, and parking. The traffic analysis included the following areas:

- Mystic Valley Parkway/Route 16 and its intersections with Alewife Brook Parkway, Auburn Street and Winthrop Street;
- Boston Avenue and its intersections with High Street, Mystic Valley Parkway/Route 16, North Street, Winthrop Street, College Avenue, and Harvard Street;
- Broadway and its intersections with Boston Avenue and Winchester Street/Albion Street;
- College Avenue at its intersections with Powderhouse Boulevard/Broadway/Warner Street and George Street;
- Main Street at its intersections with High Street/Salem Street/Forest Avenue/Riverside Avenue, South Street and Mystic Valley Parkway/Route 16

eastbound ramps, Mystic Valley Parkway/Route 16 westbound ramps, Mystic Avenue, Harvard Street, and George Street;
- Medford Street and its intersections with Broadway, Lowell Street, Central Street, School Street, Pearl Street, Walnut Street, Highland Avenue, and Somerville Avenue;
- Highland Avenue and its intersections with Lowell Street, Central Street, School Street, and McGrath Highway;
- Washington Street and its intersections with Innerbelt Road, McGrath Highway/Route 28, Somerville Avenue/Webster Street and Beacon Street;
- Prospect Street and its intersections with Somerville Avenue, Webster Avenue, Cambridge Street and Hampshire Street;
- O'Brien Highway and its intersections with Third Street, Water Street, North First Street, Mid-Block Pedestrian Crossing, Land Boulevard/Gilmore Bridge; and Museum Way; and
- Cambridge Street at First Street.

According to the DEIR, future build model runs for Alternatives 1 through 6 were prepared by including the extended Green Line as a mode choice and quantifying the number of vehicle trips expected to change mode from passenger car to transit service. Using additional model runs, peak hour turning movements, estimates of pick-up/drop-off and park-and-ride trips were generated, and peak hour volumes were determined and incorporated into LOS analyses. These LOS analyses and model data were then used to identify potential mitigation measures into the roadway network and evaluate their effectiveness. The DEIR proposed mitigation measures for intersections where LOS E/F conditions resulted because of the Build Alternative and where LOS E/F conditions under the No-Build Alternative were notably worsened (generally an increase in control delay of more than ten seconds). Pedestrian LOS is not expected to change and in many cases will be improved. Currently-designated and future bicycle facilities will not be negatively impacted under Alternative 1.

Proposed vehicular, bicycle and pedestrian mitigation includes: traffic signal timing and phasing modifications; new traffic signal equipment; geometric modifications at intersections; new pavement markings; addition of 270 bicycle parking spaces; and pedestrian signal improvements at 29 locations. Traffic mitigation is proposed at six intersections:

- Boston Avenue at Winthrop Street;
- Boston Avenue at College Avenue;
- Washington Avenue at McGrath Highway;
- Prospect Street at Somerville Avenue;
- Washington Street at Somerville Avenue/Webster Street; and
- Medford Street at Pearl Street.

Design of these intersection mitigation measures, as well as the establishment of construction management and detour plans, should be reviewed and designed collaboratively with MassDOT, the City of Cambridge, City of Somerville, City of Medford, and respective Police and Fire Departments to ensure conformance with applicable standards and regulations.

The DEIR also discussed the project's relationship to O'Brien Highway reconstruction plans from Third Street to Museum Way associated with the Full-Build North Point development. While the traffic analysis assumes that all mitigation associated with North Point will be in place by 2030, delays in project development require that certain mitigation measures be implemented by MassDOT to mitigate impacts of the Green Line Extension. These intersection improvements have been incorporated into the list of traffic-related mitigation measures proposed by MassDOT in the DEIR.

As part of the project's mitigation package, MassDOT has pledged to work with cities to develop station-area parking enforcement plans. While parking enforcement is ultimately the responsibility of each municipality, I encourage an open dialogue between MassDOT and each city to establish parking management and enforcement plans that effectively mitigate illegal parking within one-half mile of the stations. Additionally, as station designs are advanced, I encourage MassDOT to revisit opportunities to reduce vehicular traffic associated with the introduction of new stations through strong emphasis on bus route, pedestrian, and bicycle connections.

Freight Service

As indicated in the DEIR, the project will operate adjacent to operating rail lines, including the MBTA Lowell Line, the MBTA Fitchburg Line, and Pan Am Railway's (PAR) Yard 8. Freight rail operations in the project area are provided by two railroads: CSX and PAR's Springfield Terminal Railway. The DEIR described existing rail operations and routes along the project corridor. With the exception of impacts within Yard 8, the expansion of Green Line service along the Lowell Line ROW is not anticipated to negatively impact freight rail service along the corridor. Freight rail service will be maintained throughout the construction period.

According to the DEIR, the main impact to freight operations will be the use of Yard 8 for the Maintenance Facility. All PAR movements arriving or departing via the MBTA Lowell Line pass through Yard 8. As currently proposed, the project would include the reconstruction of the adjacent Yard 10 lead track, to allow PAR to continue through operations or temporarily store freight cars. I note comments received from PAR on the DEIR and concerns raised regarding the potential impact of MassDOT's use of Yard 8 on PAR operations. These comments should be addressed as part of the Maintenance Facility portion of the FEIR scope outlined later in this Certificate.

Noise/Vibration

The DEIR presented an analysis of existing and proposed noise and vibration conditions along the project corridor, prepared based upon methodology defined in the FTA guidance manual *Transit Noise and Vibration Impact Assessment* (Report FTA-VA-90-1003-06, May 2006). The DEIR included a description of background information on the subject matter, a description of FTA sensitive land-use categories, identified sensitive locations along the corridor, and contained measurement results of the existing noise conditions for both noise and vibration impacts.

The DEIR states that the project corridor's existing noise environment is generally dominated by trains on the MBTA commuter rail lines. Existing noise measurements included nine long-term (24-hour) and seven short-term (1-hour) locations and calculated: Existing Day-Night Average Sound Levels (Ldn); Existing Peak-Transit Hour Sound Level (Leq); Commuter Train Noise Level (Lmax); and Distance to Nearest Track. These measurements were taken to characterize the existing noise environment along various segments of the project route. The DEIR measured reference vibration levels of the commuter and Amtrak trains at Tufts University Alumni Field and performed measurements of the vibration propagation characteristics of the soil at three locations along the proposed corridor (200 Innerbelt Road, 20 Vernon Street, and Tufts University Alumni Field). Measurements were conducted of train passbys at several distances from the track centerline (50 to 250 feet).

Proposed noise and vibration impacts were analyzed for the various Build Alternatives and the type and location of mitigation measures required to mitigate potential significant noise and vibration impacts were presented in the DEIR. The DEIR acknowledges that the project will add a new noise and vibration source to the environment along the project corridor. While there is an existing noise and vibration source along the ROW, relocating the commuter rail lines and adding new light rail lines have the potential to increase future noise at some noise-sensitive and vibration-sensitive receptors. The DEIR summarized noise level projections for sensitive receptors without mitigation and identified their location, distance from the tracks, existing noise levels, moderate and severe noise impact criteria, future predicted noise levels, increases in noise levels over existing conditions, and the number of "moderate" and "severe" impacted buildings. Alternative 1, without mitigation, would result in moderate noise impact to 120 residential buildings and three institutional buildings, and severe noise impact to 41 residential buildings and one institutional building. The DEIR stated that vibration impact from the commuter trains generally occurs within 60 feet of the future commuter rail near track centerline and within 40 feet of the proposed Green Line near track centerline. The DEIR summarized vibration level projections for sensitive receptors without and mitigation and indentified their location, distance from the near track, maximum vibration velocities, the total number of impacted buildings, and which rail line was the cause of impact. For Alternative 1, without mitigation, vibration impact is projected at 90 residential buildings and three institutional buildings.

The DEIR stated that based upon the FTA guidance document, the project would mitigate both moderate and severe noise impacts wherever practical and wherever existing noise levels are above 65 dBA. The DEIR concluded that noise mitigation including noise barriers, sound insulation treatments, and rail lubrication would be feasible, reasonable, and effective in mitigating all potential noise impacts due to the project for all alternatives. The DEIR presented a goal for mitigating potential vibration impact below the impact criteria of 72 VdB for Green Line trains and 75 VdB for commuter trains. The DEIR concluded the vibration mitigation, including up to 19,700 track-feet of vibration mitigation such as ballast masts or resilient fasteners on the Green Line and relocated commuter rail tracks and the relocation or use of specially-engineered trackwork (flange-bearing or moveable-point frogs) for 12 crossovers and turnouts, would be effective in keeping future vibration levels at or below existing levels for commuter trains and below impact criterion for Green Line trains.

I received several comments questioning the validity of noise and vibration assessments at certain locations given that individual properties were not physically inspected. The level of noise and vibration assessment included with the DEIR is commensurate with the level of detail anticipated given the 10% design status of the project and effectively serves the MEPA process in identifying areas where mitigation will be necessary. The amount, type and specifics of noise and vibration mitigation appropriate for individual properties and structures will be refined during the ongoing design process in accordance with FTA guidance and standards. I have required MassDOT, as part of the scope for the FEIR, to provide a conceptual plan for evaluating, monitoring and compensating affected parties along the corridor with respect to noise and vibration.

Open Space and Historic Resources

As required, the DEIR included a discussion of the potential impact of the project on cultural resources including open spaces, historic properties and archaeological resources. This information was also prepared to fulfill the FTA's obligations under Section 106 of the National Historic Preservation Act and the Section 4(f) provisions of the U. S. Department of Transportation Act of 1966.

The DEIR identified and described public parks, recreation areas and conservation lands within an area of potential effect (APE) that extends approximately 100 feet on either side of the proposed rail corridors, station locations and maintenance and/or interim train storage facilities. It noted that none of the five areas identified within the APE will be directly affected by the project. It indicated that there would be an indirect effect on one site (Trum Playground) associated with an increase in noise levels. The DEIR indicated that expansion of the existing 5-foot noise barrier within the right-of-way to 10 feet would effectively mitigate associated impacts.

The DEIR summarized the historic and archaeological reconnaissance survey conducted within the APE; defined as an area extending 125 feet or one assessor's lot on either side of the proposed routes, station locations and maintenance and/or interim train storage facilities. It indicated that a total of 423 individual properties, two railroad corridor landscapes and 15 areas/districts were identified within the APE. Of these properties, four are individually listed in the National Register, 16 are recommended eligible for listing and 52 were previously recorded in the Inventory of Historic and Archaeological Resources of the Commonwealth. The DEIR noted direct impacts associated with removal of the existing Lechmere Station and re-construction of the station on the opposite side of O'Brien Highway. Indirect impacts associated with noise, vibration and changes to the visual setting may affect several properties identified in the DEIR.

The DEIR identified five areas where potentially significant archaeological resources may be located. It noted that previous activity within the corridor, including extensive earth moving and substantial filling, limit the possibility of finding intact archaeological deposits within the majority of the APE.

The DEIR indicated that mitigation will be provided for historic resources that are listed or eligible for listing in the National Register and that will be adversely affected by the Project. Mitigation for Lechmere Station will include archival documentation, consideration of salvage of

architectural elements of the Station and, potentially, interpretive signage. Other mitigation will include construction of noise walls and sound insulation. The DEIR indicates that design of the rail bed, ballast and track will incorporate measures to avoid impacts associated with vibration. To the extent that archaeologically sensitive areas are not avoided through project design, then the proponent will consult with MHC and FTA regarding the necessity of an intensive (locational) archaeological survey. MHC, in its role as the State Historic Preservation Officer (SHPO) will continue consultations with MassDOT and FTA regarding the development and refinement of project mitigation through the Section 106 process.

Hazardous Waste/Contaminated Soils

The Green Line Extension will traverse areas with a long-standing industrial and commercial history. As such, the project corridor contains numerous locations where impacted soil may be present and will require soil and/or groundwater remediation prior to or as part of project design or construction. Remediation will likely include removing contaminated soils and pumping contaminated groundwater in accordance with the provisions of the Massachusetts Contingency Plan (MCP), M.G.L. c.21E and c.21C, and the Resource Conservation and Recovery Act (RCRA).

The DEIR indicated that a Phase I Environmental Site Assessment (ESA) has been conducted for all the properties that are part of the land acquisitions for the project. As part of the Phase I ESA process, sites with Recognized Environmental Conditions (RECs) are evaluated. The DEIR included a description of each REC and its relative impact on proposed station sites and the Maintenance Facility site for each project alternative, along with respective Release Tracking Numbers (RTNs). The DEIR presented a general discussion of how the project will manage contaminated media and comply with applicable hazardous materials regulations for both soil and groundwater oil and hazardous materials (OHM).

The project will be required to comply with the MCP. The DEIR has indicated that at the completion of response actions for which an RTN has been obtained, but a closure report consisting of a Response Action Outcome (RAO) has not yet been submitted, a condition of No Significant Risk must exist as defined by the MCP. The MassDOT has indicated that a preferred outcome is a Class 1-A RAO in which contamination is reduced to background levels. In situations where a Class 1-A RAO cannot be supported, MassDOT should evaluate alternatives to a Class 1-A RAO designation. Proposed mitigation measures during construction may include special handling, dust control, and management and disposal of contaminated soil and groundwater.

MassDEP has indicated that if there is no pre-characterization of soils along the ROW, sampling of every 200 cubic yards of soils is recommended, including both the excavation piles and in-situ sampling. MassDEP notes that issues related to soil sampling, as further discussed in its comment letter, should be addressed prior to the 50-percent design stage of the project. MassDOT should consult with the MassDEP as project design proceeds and construction commences to ensure that planning and implementation of demolition and management of contaminated soils is performed consistent with applicable regulations and the recommendations made in the MassDEP comment letter.

Construction Period Impacts

MassDOT has acknowledged the challenges associated with the construction period impacts of such a complex project including: narrow roadways; traffic volumes; continuous access requirements to a variety of land uses; limited staging areas; and maintaining existing rail operations along the project corridor. Construction period mitigation measures must seek to minimize impacts to vehicular traffic, pedestrian and bicycle traffic, on-street parking, public access, and emergency access to local businesses and residences.

The DEIR included a conceptual construction sequencing and staging plan. Existing commuter rail and freight rail service will be maintained throughout the construction period. Alternative 1 will require the replacement of seven highway bridges and four railroad bridges, as well as the reconstruction of the Lechmere viaduct and the construction of two new viaducts at Red Bridge Junction to serve the Union Square Branch. The DEIR states that bridge reconstruction will be staged whenever possible to maintain traffic over respective bridges during construction; however, two bridges, Medford Street and Broadway Street in Somerville, will need to be closed during construction and detours established.

The project will also include numerous intersection upgrades to accommodate new transit stations, new traffic patterns and volumes, pedestrians, and bicycles. The DEIR outlined general criteria to be required for traffic management and construction staging along roadways and rail corridors. Blasting is not anticipated for construction of the project. Construction procedures will comply with MassDEP's Solid Waste and Air Quality Control regulations, rodent control policies will be implemented, and construction policies will require that all diesel construction equipment used on-site will be fitted with after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). The project will comply with MassDEP's idling regulations (310 CMR 7.11) and MassDOT has committed to posting idling restriction signs on project construction sites. MassDOT should work with contractors to establish protocols to alleviate dust, noise, odor and nuisance conditions which may occur during construction.

Final identification of effective construction period mitigation measures requires advancement of project design. MassDOT must prepare a detailed plan to address myriad construction period impacts through coordination with the City of Cambridge, City of Somerville and City of Medford, and their respective Police and Fire Departments. I encourage MassDOT to also engage the broader community in the development of these plans as part of the mandated community outreach as project design is refined and prior to construction. As noted above, such a plan should seek to avoid, minimize and mitigate potential impacts to vehicular traffic, pedestrian and bicycle traffic, on-street parking, public access, emergency access to local businesses and residences, dust, noise, odor, rodents and construction-related nuisance conditions.

SCOPE

As discussed above, I am providing the following Scope for the preparation of a FEIR, limited to the topics outlined below. Although I recognize that this Scope will not address every issue raised by project commenters, I am confident that resolution of these remaining details will allow MassDOT to demonstrate that the project has fully complied with the requirements of MEPA. Additional topics will be addressed through the state and local permitting process and through MassDOT's ongoing community involvement processes.

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Certificate. The FEIR should identify, describe and assess environmental impacts of any changes in the project that have occurred between the preparation of the DEIR and FEIR.

Maintenance Facility

S-001-001

Comment letters on the DEIR express a widespread lack of support for location of the Maintenance Facility at Yard 8 in Somerville. As part of the FEIR, MassDOT must expand upon the December 9, 2009 technical memorandum and provide a quantitative environmental analysis of both the Mirror H and Option L locations and include for comparative purposes the existing analysis of Yard 8. I note that comments submitted on the DEIR express preferences for both Mirror H and Option L, but based on the information and comments submitted to date, it appears that Option L may be the most feasible alternative location and the one with the fewest potential conflicts and impacts.

The analysis should expand upon the evaluation criteria presented in the technical memorandum (summarized on Page 4-1 of the report). The FEIR should provide a comprehensive analysis of Maintenance Facility siting and operations for not only these previously explored criteria but also on: land uses (including EJ populations), impervious area, parking, stormwater, hazardous materials, traffic, land acquisition, noise, vibration, air quality, open space, historic and archaeological resources, the Community Path, and construction period impacts.

The FEIR should provide a detailed assessment of Maintenance Facility sizing, and in exploring alternatives seek to minimize the project footprint and potentially reduce land acquisitions through innovative design (e.g., consolidating employee parking areas, shifting MBTA offices out of the Cobble Hill area property as suggested by Congressman Capuano, splitting storage and maintenance operations, etc.). The FEIR should evaluate impacts to freight operations for each design alternative, noting operational or deed restrictions that may hinder flexibility in Maintenance Facility siting or operations.

S-001-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. Design for the maintenance facility will be developed during the Project's preliminary engineering stage.The FEIR provides an assessment of the maintenance facility sizing and footprint; preliminary engineering will address innovative design issues to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering.

Air Quality

S-001-002 The FEIR should include a narrative discussion clarifying the air quality modeling assumptions, challenges associated with the inherent evolution of modeling programs and input data, and how the air quality modeling results were conducted in a manner that sufficiently demonstrated consistency with the SIP.

College Avenue Station

S-001-003 The DEIR presented a two phased approach to the Green Line Extension, with the initial phase terminating at College Avenue in Medford. In prior MEPA reviews and public meetings, the environmental impacts associated with College Avenue were reviewed within the context of functioning as an intermediate station along the project route. I have received numerous comments concerned about how the College Avenue Station will function for an undefined period as a terminus and the associated environmental impacts.

While MassDOT evaluated the College Avenue Station in the DEIR, it is unclear how modeling assumptions (pick-ups/drop offs, pedestrian trips, etc.) considered the unique attributes of a station acting as the terminus of a light rail line. The FEIR should revisit the DEIR models, revise as necessary to accurately assess the predicted function of the station, and describe differences in operations and mitigation measures between the DEIR and the FEIR, if any. The FEIR should clarify how College Avenue Station, functioning as a terminus, will impact traffic, parking, pedestrian, and bicycle operations within the study area and outline sufficient mitigation measures to offset identified negative impacts. The FEIR should describe Green Line operations at the proposed terminus (i.e. train reversals, temporary train storage, movement of personnel, etc.) and how the facility has been designed to accommodate terminal station ridership demand. The FEIR should clarify how train operations in Alternative 1 at this location may impact sensitive noise and vibration receptors, and present appropriate mitigation measures.

Lechmere Station

S-001-004 The project requires the relocation of the existing Lechmere Station in Cambridge. Lechmere Station presently functions as a northern terminus for Green Line operations, but will be transformed into an intermediate station for both the Medford and Union Square branches of the Green Line Extension. Lechmere Station is a hub for both Green Line light rail and MBTA bus routes and is currently integrated into the urban fabric, located between Cambridge Street and O'Brien Highway. The project will require the relocation of the station to the north side of O'Brien Highway, adjacent to a new street grid proposed as part of the North Point development project.

The FEIR should explore ways to reduce the proposed parking program (in light of the station no longer functioning as a terminus) and consider other design refinements to reduce impacts of the relocated Lechmere Station on abutting land uses (notably the Glass Factory Condominiums). I acknowledge the concerns regarding noise and vibration impacts and the potential for MBTA operational conflicts with residences closest to the station. Furthermore, I note concerns regarding pedestrian and bicycle safety in and around the new station location and

S-001-002

Chapter 3 of the FEIR clarifies the air quality modeling assumptions, challenges associated with the evolution of modeling programs and input data, and how the air quality modeling results were conducted to demonstrate consistency with the SIP.

S-001-003

FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

Section 4.4 of the FEIR, Access and Circulation, describes pedestrian and traffic access for the proposed College Avenue Station. Bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering.

Section 4.3 of the FEIR describes how College Avenue Station would operate as a terminus. Ridership projections and the methodology used in their development are described in DEIR/EA Section 3.4, Ridership Methodology and specific details for College Avenue Station are provided in FEIR Section 4.4.

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors.

S-001-004

Parking at the new Lechmere Station was reduced in the revised conceptual design, included in FEIR Chapter 5, Lechmere Station. The revised conceptual plans will be refined in the preliminary engineering

S-001-004

bus circulation routes. The FEIR should clarify modeling assumptions, and proposed station layout and mitigation measures that will be implemented to effectively and safely convey bus passengers, pedestrians and cyclists from the neighborhood to the relocated Lechmere Station. I do not expect MassDOT to present final station design and architectural drawings in the FEIR, as this is a level of detail that goes beyond the current design phase. Final station design should be explored further, as I have requested with other stations, during the public involvement process. However, the level of information presented in the FEIR should be of sufficient conceptual design to reflect anticipated station layout and operations, relationships to the broader transportation network, existing and permitted buildings, and where mitigation measures would be implemented.

Public Involvement Plan

S-001-005

As noted previously, a key to the overall success of the Green Line Extension project is the effective integration of light rail service into the existing urban landscape. To facilitate collaborative land use planning, review of advanced project design elements (notably station design), and implementation of mitigation measures, I am directing MassDOT to develop a Public Involvement Plan (PIP) for the project. The FEIR should present a PIP that clearly outlines how a broad range of participants (i.e., representatives of regional planning agencies, local government, business interests, community groups, representatives of EJ areas and the disabled community, abutters, and bicyclist and pedestrian groups) will continue to provide meaningful community involvement throughout the duration of the entire project, including detailed design, engineering, construction phases. This PIP should build on the lessons learned from the previous Advisory Groups convened in association with the project, consider ideas presented as part of the Community Corridor Planning Project, reflect comments received on the DEIR, and represent a serious commitment by both MassDOT and the MBTA to actively engage the public upon completion of MEPA review. I also expect that the PIP presented in the FEIR will provide not only a plan for procedural engagement of the various participants, but that it will also outline the primary substantive topics that are anticipated to be addressed through the PIP process.

Mitigation/Section 61 Findings

S-001-006

The FEIR should include a separate chapter on mitigation measures. This chapter on mitigation should include distinct draft Section 61 findings for each State Agency action. The draft Section 61 Findings should contain a clear commitment to mitigation, a schedule for implementation, an estimate of the individual costs of the proposed mitigation and the identification of the parties responsible for implementing the mitigation.

In response to the extensive comments received regarding future mitigation commitments on behalf of MassDOT and the MBTA, the FEIR should include a conceptual plan for evaluating, monitoring, and compensating affected parties along the corridor with a specific emphasis on, but not limited to, noise, vibration, and land acquisition impacts. This conceptual plan should address not only mitigation associated with the future ongoing operations of the Green Line Extension, but impacts uniquely limited to the construction period. I encourage MassDOT to integrate the components of this plan into the broader framework of the PIP to provide a forum for information sharing between future MassDOT studies and data and interested and affected parties.

stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, and other amenities. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5.

The revised conceptual plans for Lechmere Station also include bus facilities and bus waiting areas. Mitigation measures for station impacts are described in FEIR Chapters 5 (Lechmere specific) and 8.

S-001-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

S-001-006

Chapter 8 of the FEIR addresses Draft Section 61 Findings and Mitigation Commitments. As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

EEA# 13886 DEIR Certificate January 15, 2010

Comments/Circulation

S-001-007 The FEIR should contain a copy of this Certificate and a copy of each comment letter received. The FEIR should respond fully to each substantive comment received to the extent that it is within MEPA jurisdiction. This directive is not intended to and shall not be construed to enlarge the Scope of the FEIR beyond what has been expressly identified in this Certificate.

S-001-008 In accordance with Section 11.16 of the MEPA Regulations and as modified by this Certificate, the MassDOT should circulate a hard copy of the FEIR to each State and city agency from which MassDOT will seek permits or approvals and to each of the City agencies that submitted comments. The MassDOT should also circulate a copy of the FEIR to those submitting individual written comments. To save paper and other resources, MassDOT may circulate the FEIR in CD-ROM format, although MassDOT should make available a reasonable number of hard copies, to accommodate those without convenient access to a computer to be distributed upon request on a first come, first served basis. MassDOT should send a notice of availability of the FEIR (including relevant comment deadlines and appropriate addresses) to those who signed the petition and for which addresses are available. In addition, a copy of the FEIR should be made available for public review at the Cambridge, Medford and Somerville public libraries.

January 15, 2010
Date

Ian A. Bowles

IAB/HSJ/hsj

Comments received:

10/26/2009 Dorie Clark
11/06/2009 Donald Burgess
11/11/2009 Charles Marquardt
11/12/2009 Diane Georgopulos
11/16/2009 Frances Donovan
11/16/2009 Bob Nesson
11/16/2009 Alec Wysoker
11/16/2009 Juliette Rooney-Varga
11/16/2009 Charles Fineman
11/16/2009 John Paul
11/17/2009 Donna Keefe
11/17/2009 Bette Skandalis
11/18/2009 Massachusetts Historical Commission
11/18/2009 Brian McCarthy
11/18/2009 W. Scott Cooledge
11/19/2009 Adam Whelan

S-001-007

The FEIR contains a copy of the Secretary's Certificate on the DEIR, copies of all comment letters received, and responses to all substantive comments.

S-001-008

Copies of the FEIR have been distributed as requested.

11/19/2009	K. McCarte
11/23/2009	Kevin Oliver
11/23/2009	Conservation Law Foundation
11/24/2009	John Read
11/30/2009	MassDOT November 18, 2009 Green Line Extension Hearing Transcript
12/02/2009	City of Medford Office of Human Diversity and Compliance
12/04/2009	Anthony Guarciariello & Bernie Costanzo
12/09/2009	Arnold Reinhold
12/11/2009	Keelin Deasy
12/14/2009	State Senator Patricia Jehlen, 2nd Middlesex District
12/15/2009	Cynthia Maurice
12/22/2009	William Uricchio
12/23/2009	David Tonnesen
12/23/2009	Terri Anderson
12/23/2009	William Bennett
12/23/2009	Rebecca Altepeter
12/23/2009	Cheryl Bakey
12/23/2009	Alden Zecha
12/23/2009	Cynthia Pellegrini
12/23/2009	Sam Smiley
12/23/2009	Ulandt Kim
12/23/2009	William Gilligan
12/23/2009	Lana Hermann
12/23/2009	Linda Goulet
12/23/2009	Pamela Su
12/23/2009	Jeff Altepeter
12/23/2009	Max Fine
12/23/2009	Matthew Fallon
12/23/2009	Debra Olin
12/23/2009	Dan Berman
12/23/2009	Jill Slosburg-Ackerman
12/23/2009	Bonnie Borthwick
12/23/2009	Chris Mesarch
12/23/2009	David Sholl
12/23/2009	Sherry Autor
12/23/2009	Beverly Sky
12/23/2009	Caroline Traugott
12/23/2009	Lois Bennett
12/23/2009	Kyle Grady
12/23/2009	Gina Kamentsky
12/23/2009	Lanna Grady
12/23/2009	City of Medford Energy and Environment Office
12/24/2009	Sierra Club
12/28/2009	Medford Fire Department
12/28/2009	Raymond Nagem
12/28/2009	Laurel R.T. Ruma

12/28/2009	Michael Korcynski
12/29/2009	Raymond Nagem – 2nd letter
12/29/2009	Samantha Butler
12/29/2009	Julia Shepley
12/29/2009	Brendan Driscoll
12/30/2009	City of Medford Office of Veterans' Services
12/30/2009	Alisa Wolf
12/30/2009	Marc Davidson
12/30/2009	Pauline Lim
12/30/2009	April Evans
12/31/2009	David Douglas
12/31/2009	Kevin Costello & Bethany Morris
12/31/2009	Alan Greene
01/01/2010	Michael Adamian
01/01/2010	Matthew Alford
01/01/2010	Christopher Bader
01/01/2010	Len Brault
01/02/2010	Chris Braiotta
01/02/2010	bovamarie@comcast.net
01/02/2010	Lois Grossman
01/02/2010	Jill Richard
01/03/2010	David Anderson
01/03/2010	Connie Blaszczyk
01/03/2010	Alan Brody
01/03/2010	Bathsheba Grossman
01/03/2010	Kevin Mitchell
01/03/2010	Mini Ann Polumbaum
01/03/2010	Marsha Goldberg
01/03/2010	David & Jane Dahlbacka
01/03/2010	Margaret Weigel
01/03/2010	Jessica Zeigler
01/04/2010	City of Medford Department of Public Works
01/04/2010	Robert G. Martel, Property Manager Brickbottom Condominium Trust
01/04/2010	Rebecca Didier
01/04/2010	Gerry Cronin
01/04/2010	Deborah Davidson
01/04/2010	Phyllis Ewen
01/04/2010	Steve Gottlieb
01/04/2010	Kevin White
01/04/2010	Robin Severino
01/04/2010	Lynn Rosenbaum
01/04/2010	Jeff Reese
01/04/2010	Cummings Foundation, Inc.
01/04/2010	Cummings Properties, LLC
01/04/2010	Martha Stone
01/04/2010	Justine Kahn

01/05/2010	City of Medford Office of Community Development
01/05/2010	City of Medford Office of the Building Commissioner
01/05/2010	Craig Kelley, Cambridge City Councilor
01/05/2010	Mayor Michael J. McGlynn, City of Medford
01/05/2010	K. Tracy Munn
01/05/2010	Keith Fallon
01/05/2010	Lois Fiore
01/05/2010	Priscilla Lamb Kennedy
01/05/2010	Lana Hermann – 2nd letter
01/05/2010	Mark Jaquith
01/05/2010	Damien DiBona
01/05/2010	Adelaide Smith
01/05/2010	Stuart & Lana Camiel
01/05/2010	Connie Blaszczyk – 2nd letter
01/05/2010	Norman Fine
01/05/2010	Chris Leary
01/05/2010	Dan Tremitiere
01/05/2010	Stephen Paul Linder
01/05/2010	Bill Kipp
01/05/2010	Dennis Dunn
01/05/2010	Elissa Katler
01/05/2010	M. Susanna Darling
01/05/2010	Lisa Gordon
01/05/2010	Ramon Bueno
01/05/2010	Joelle Bueno
01/05/2010	Andres Bueno
01/05/2010	Steven Troian
01/05/2010	Patrick Chasse
01/05/2010	Catherine Truman
01/05/2010	Ally Hines
01/05/2010	Debra Weisberg
01/05/2010	Paula Brody
01/05/2010	George Gabin
01/05/2010	Susan Strauss – Fitchburg Street, Somerville
01/05/2010	Pauline Lim – 2nd letter
01/05/2010	Jayme Lacour
01/05/2010	Lee Busch
01/05/2010	Jim McGinnis
01/05/2010	Chris and Taco Matthews
01/06/2010	United States Congressman Michael Capuano, 8th District Massachusetts
01/06/2010	Stephanie Muccini Burke, Medford City Councilor
01/06/2010	Livable Streets Alliance
01/06/2010	Union Square Main Streets
01/06/2010	Karen Holtzman & Thomas Gardon
01/06/2010	Dina Rudick
01/06/2010	Jessica Straus

01/06/2010	Felice Regan
01/06/2010	Tara Urspruch
01/06/2010	James Campen
01/06/2010	Sylvie Vincent
01/06/2010	Erik Jacobs
01/06/2010	Walter Gilbert
01/06/2010	Tom Devlin
01/06/2010	Irving Camiel and Lawrence E. Johnson
01/06/2010	David Filimon
01/06/2010	Carla Wilbur
01/06/2010	Brian Flynn
01/06/2010	Jeffrey Davis
01/06/2010	Kate Snodgrass
01/06/2010	Don Walker & Vicki Halal
01/06/2010	Shuba Rajashri Iyengar
01/06/2010	Celia Gilbert
01/06/2010	W. Scott Cooledge – 2nd letter
01/06/2010	Kay Canavino & Patricia Lyga
01/06/2010	Rob Kassel
01/06/2010	Robin Johnson
01/06/2010	Fernando Colina
01/06/2010	Vaughan Rees
01/06/2010	Anthony Espy
01/06/2010	Shriram Nallamshetty
01/06/2010	John Baehrend
01/06/2010	Paul Cote
01/07/2010	State Representative Timothy J. Toomey, Jr., 26th Middlesex District
01/07/2010	Brickbottom Artists Building/Condominium Trust
01/07/2010	Green Line Advisory Group for Medford (GLAM)
01/08/2010	Kimberly Wolfram
01/07/2010	Doug Carr
01/07/2010	Laurinda Bedingfield
01/07/2010	Francis Brown
01/07/2010	John Bay
01/07/2010	Peter Gee
01/07/2010	Rita Donnelly
01/07/2010	Sarah Bapst
01/07/2010	Robert Mantell
01/07/2010	Jenny Bauer
01/07/2010	Jurgen Weiss
01/07/2010	Rex Gonsalves
01/07/2010	John Harding
01/07/2010	Donna Laquidara – Carr
01/07/2010	Jordana Psiloyenis
01/07/2010	Tom Meek
01/07/2010	Barry Rafkind

01/07/2010	Rolando Carrera
01/07/2010	Lucy Chen
01/07/2010	Sara Rosenfeld
01/07/2010	Carolyn Ross
01/07/2010	Jared Ingersoll
01/07/2010	Christopher DesAutels
01/07/2010	Jennifer DeAutels
01/07/2010	Jack Beusmans
01/07/2010	Nicholas Watson
01/07/2010	Melissa Glenn Haber
01/07/2010	Alex & Ami Feldman
01/07/2010	Elaine Krohn
01/07/2010	Kate Zebrose
01/07/2010	Steve Mulder
01/07/2010	Phil Goff
01/07/2010	Eve Melnechuk
01/07/2010	Max Malaret
01/07/2010	Susan Strauss – Willoughby Street, Somerville
01/07/2010	Jennifer Mazer
01/07/2010	Adam Chiavoli
01/07/2010	Lynn Sahaida
01/07/2010	Peter Ungaro
01/07/2010	George Perkins
01/07/2010	Susan Barry & Seth Boyd
01/07/2010	Alex Epstein
01/07/2010	Naomi Slagowski
01/07/2010	Ellin Reisner
01/07/2010	Charles Marquardt – 2nd letter
01/07/2010	Bathsheba Grossman – 2nd letter
01/07/2010	James O'Keefe
01/07/2010	Samir Charnalia
01/07/2010	Umair Khan
01/07/2010	Grace Karg
01/07/2010	Charles McNeil
01/07/2010	Florence Gates
01/07/2010	Marc Mcharo
01/07/2010	Loudes Esparragoza
01/07/2010	Chandace Arledge
01/07/2010	Neil Fennessey
01/07/2010	Edward Batista, Jr.
01/07/2010	Jose Borges
01/07/2010	Sotiris Stefanopoulos
01/07/2010	Lena Matranga
01/07/2010	Dr. William Wood
01/07/2010	Patricia Mason
01/07/2010	Harpreet Pall

01/07/2010	Kenneth Krause
01/07/2010	Betty Lee Saccoccio
01/07/2010	Trustees of University Place Condominiums
01/08/2010	Arlington Transportation Committee
01/08/2010	Wachusett Greenways
01/08/2010	Walk Boston
01/08/2010	Massachusetts Department of Conservation and Recreation
01/08/2010	Somerville Transportation Equity Partnership (STEP)
01/08/2010	Conservation Law Foundation – 2nd letter
01/08/2010	Metropolitan Area Planning Council
01/08/2010	William A. White, Jr., City of Somerville, Alderman at Large
01/08/2010	Glass Factory Condominium Trust
01/08/2010	Medford Green Line Neighborhood Alliance (MGNA)
01/08/2010	Massachusetts Department of Environmental Protection - Boston
01/08/2010	Somerville Chamber of Commerce
01/08/2010	Frederick N. Dello Russo, Jr., Medford City Councilor
01/08/2010	Tufts University
01/08/2010	Jeffery L. Roelofs, P.C. (on behalf of the Brickbottom Condominium Trust)
01/08/2010	Friends of the Community Path
01/08/2010	State Senator Patricia Jehlen, 2nd Middlesex District (2nd letter)
01/08/2010	Pan Am Railways
01/08/2010	State Representative Carl M. Sciortino, Jr., 34th Middlesex District
01/08/2010	State Representative Denise Provost, 27th Middlesex District
01/08/2010	Massachusetts Bay Transportation Authority
01/08/2010	Mayor Joseph A. Curtatone, City of Somerville
01/08/2010	City of Somerville Office of Strategic Planning and Community Development
01/08/2010	Medford Police Department
01/08/2010	Professional Services Corporation, PC (on behalf of Brickbottom Condominiums)
01/08/2010	Massachusetts Department of Environmental Protection - NERO
01/08/2010	Mass Central Rail Trail Coalition
01/08/2010	City of Somerville Board of Aldermen
01/08/2010	City of Cambridge Executive Department
01/08/2010	East Cambridge Planning Team
01/08/2010	Barbara Boussard
01/08/2010	Lee Auspitz
01/08/2010	Stephen H. Kaiser, PhD.
01/08/2010	Josh Smift
01/08/2010	Sam Crosbie
01/08/2010	Peter Bronk
01/08/2010	Stephanie Rubino
01/08/2010	Brian Hilliard
01/08/2010	Taeshin Park
01/08/2010	Lisa Hodsdon
01/08/2010	Joel Weber
01/08/2010	Anne Tate
01/08/2010	David Tremblay

01/08/2010	Patty Caya
01/08/2010	Amy Semmes
01/08/2010	Anita Suhanin
01/08/2010	David Crosbie
01/08/2010	Michael Quinn
01/08/2010	Sarah McClellan
01/08/2010	Sheila Gilmartin
01/08/2010	Daniel Hamalainen
01/08/2010	Michael Bernstein
01/08/2010	Marwa Elsabbahy
01/08/2010	Chadi Chemaly
01/08/2010	Jason Baklavas
01/08/2010	Ayesha Tariq
01/08/2010	Derek Arledge
01/08/2010	Chantel & Gregory Kosmidis
01/08/2010	Ellen Young
01/08/2010	Maggie Villiger
01/08/2010	Peter Hill
01/08/2010	Scott Clark
01/08/2010	Lynne Weiss
01/08/2010	Stephen & Gail King
01/08/2010	Satish Katpally
01/08/2010	Robert Feigin
01/08/2010	Tami Kaplan
01/08/2010	John Shayeb
01/08/2010	Kimberly Rzepecki
01/08/2010	Carole Samworth
01/08/2010	Sallyann Roth
01/08/2010	KyAnn Anderson
01/08/2010	Stephanie Geuns-Meyer
01/08/2010	Hans Geuns-Meyer
01/08/2010	Somerville Community Corporation
01/08/2010	Somerville Climate Action
01/08/2010	Alan Moore
01/08/2010	Stephanie Zawacki
01/08/2010	Groundwork Somerville
01/08/2010	Jimmy Zhang
01/08/2010	Jonathan Herzog
01/08/2010	Natasha Burger
01/08/2010	Christopher Park
01/08/2010	Linda Tamulaites
01/08/2010	Jay Wasserman
01/08/2010	John Howe
01/08/2010	David Zawacki
01/08/2010	Alice Grossman
01/08/2010	Jennifer Harris

01/08/2010	Sharman Gingrich and Christopher Harris
01/08/2010	Roberta Cameron
01/08/2010	Sandra Kosta
01/08/2010	Roger Johnsen
01/08/2010	Christopher Kaneb
01/08/2010	Laurel Siegel
01/08/2010	Maria Simoneau
01/08/2010	David Adriaansen
01/08/2010	Patricia Lyga
01/08/2010	Somerville Community Health Agenda
01/08/2010	Mystic River Watershed Association
01/08/2010	Karen Molloy
01/08/2010	Ivy Turner
01/08/2010	Jeff Levine
01/08/2010	Tai Dinnan
01/08/2010	Bhupesh Patel
01/08/2010	Mary Anne Adduci
01/08/2010	Maria Daniels
01/08/2010	Michael & Jacqueline Heath
01/08/2010	Ravi and Stephanie Kamath
01/08/2010	Diolinda Vaz
01/08/2010	Kevin Guiney
01/08/2010	Jane Fair Bester
01/08/2010	Fred Berman
01/08/2010	Mary Regan
01/08/2010	Chip Olson
01/08/2010	Chris Dewing
01/08/2010	Adam Chamberlin
01/08/2010	Olivia Huval
01/08/2010	Tania Ahamed
01/08/2010	Anthony Lorenzo
01/08/2010	Cvetiva Popu
01/08/2010	Elias El-Wadi
01/08/2010	Gerry Cronin – 2nd letter
01/08/2010	Suzanne Lipsky
01/08/2010	Jennifer Lawrence
01/08/2010	Gail McCormick
01/08/2010	Richard Nilsson
01/08/2010	Peter Marquez
01/08/2010	Elizabeth Bayle
01/08/2010	Marc Verhagen & Ann Gallager
01/08/2010	John Roland Elliott
01/08/2010	Charles Cameron
01/08/2010	Piotr Parda
01/08/2010	Marilyn Pappas
01/08/2010	Cornelia Davis

01/08/2010	Margery Hamlen
01/08/2010	Margaret Webster
01/08/2010	Thomas Lincoln
01/08/2010	Susan Schmidt
01/08/2010	Donna Brallier
01/08/2010	Heather Hoffman
01/08/2010	Christopher Beland
01/08/2010	Krogen Carreno
01/08/2010	Barbara Steiner
01/08/2010	Roy Rudolph
01/08/2010	Heather Van Aelst
01/08/2010	John Dieckmann
01/08/2010	Michael Sandler
01/08/2010	Randal Thurston
01/08/2010	James Feldman
01/08/2010	Loius Geppetti
01/08/2010	Maia Mamulashuili
01/08/2010	Jane Owen
01/08/2010	Sarah Bapst
01/08/2010	Alyson Schultz

Petition with 232 signatures opposing Yard 8
Petition with 143 signatures from the Community Corridor Planning Project
175 form letters/signatures from Change.org
9 comment letters with no signature or illegible signatures

Late Comments:

01/11/2010	Institute for Human Centered Design
01/11/2010	Stephen H. Kaiser, PhD. (2nd comment)
01/11/2010	Massachusetts Water Resources Authority
01/12/2010	Gabrielle Rossmer Gropman
01/12/2010	Breanna Lungo-Koehn, Medford City Councilor
01/13/2010	Rachel Rockenmacher

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

11 J

PATRICIA JEHLEN
2ND MIDDLESEX DISTRICT
MEDFORD, SOMERVILLE,
WINCHESTER AND WOBURN

ROOM 513, STATE HOUSE
OFFICE TEL: (617) 722-1576
FAX: (617) 722 1117
E-Mail:Patricia.Jehlen@state.ma.us

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DEC 14 2009

CHAIR
Committee on Elder Affairs
VICE CHAIR
Municipalities & Regional Government
MEMBER
Children, Families and People with Disabilities
Healthcare Financing
Municipalities & Regional Government
Steering & Policy

December 10, 2009

Secretary Ian Bowles, Executive Office of Energy & Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA number # 13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles,

S-002-001 I am writing to offer my comments on the Green Line Extension DEIR. I would first like to acknowledge DOT for all of their hard work on this project. I believe that the Green Line Extension is the most important transportation project that we have undertaken in many years. Completing this project in a timely manner and meeting our legal obligations is critical.

S-002-002 I fully support the Mystic Valley Parkway terminus and would like to see a commitment to extending the Green Line to Rte 16 put into writing. The Phase I terminus at College Ave does not meet the requirements of providing service to the "Medford Hillside" neighborhood. Therefore, a firm commitment to complete the extension to Rte 16 is imperative.

S-002-003 I do have particular concerns about the location of the maintenance facility. There are currently 3 proposed alternatives for the location of a maintenance facility in Somerville. The location that has been the preferred alternative for DOT has been Yard 8. This alternative would create severe hardships for residents of the Brick Bottom community and would cut off development opportunities for the city. Either the Mirror H location so called or option L would be preferable to the location at Yard 8.

S-002-004 One of the issues that has gotten a great deal of attention has been DOT's request that the DEIR be considered as a final EIR. I believe that this would be a mistake. While I can appreciate DOT's desire to have the entire EIR process out of the way, I am concerned that the current DEIR does not specify a final location for the maintenance facility nor does it accurately reflect a final design for the Rte. 16

S-002-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

S-002-002

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010).

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

S-002-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further

S-002-004

terminus station. In fact, the current DEIR contains references to substantial land takings at Rte. 16 that even DOT believes will be unnecessary. The Medford Neighborhood Green Line Association has an alternate drawing that would require no land takings at all.

The Green Line Extension Project is one of the most important public transportation projects we have undertaken in many years or are likely to undertake in the near future. I am fully supportive of this project but I am also cognizant of the need to get this important project right the first time.

Thank you for taking the time to consider these comments to the DEIR. If you have any questions, please do not hesitate to contact me.

Sincerely,

Patricia D. Jehlen

Patricia D. Jehlen
State Senator

consideration and Option L is identified as the preferred maintenance facility site.

S-002-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA. As described in the FEIR, MassDOT has selected the Option L site as the preferred maintenance facility location.

Because the subject of the FEIR addresses the Proposed Project, which does not extend to Mystic Valley Parkway/Route 16, design for a station there has not been advanced. Consideration of the Medford Neighborhood Green Line Association design will be given when that segment is studied. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133-1053

PATRICIA JEHLEN
2ND MIDDLESEX DISTRICT
MEDFORD, SOMERVILLE,
WINCHESTER AND WOBURN

ROOM 513, STATE HOUSE
OFFICE TEL: (617) 722-1578
FAX: (617) 722-1117
E-Mail:Patricia.Jehlen@state.ma.us

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CHAIR
Committee on Elder Affairs
VICE CHAIR
Municipalities & Regional Government
MEMBER
Children, Families and People with Disabilities
Healthcare Financing
Municipalities & Regional Government
Steering & Policy

January 7, 2010

Secretary Ian Bowles, Executive Office of Energy & Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA number # 13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I am writing to offer a few additional comments to my earlier comment letter. In particular I have several questions relative to the financing of the Green Line Extension and the decision to divide the project into two phases with the extension to Rte. 16 from College Ave being relegated to Phase 2.

S-003-001 I understand that there is a need for the project to be properly financially constrained; however, I question whether the maintenance facility and the relocated Lechmere station need
S-003-002 to be fully built in phase one. I also question whether the $160 million figure that the state has agreed to pay for the Lechmere relocation is completely justified. Original estimates for the relocation were closer to $70 million and construction costs have actually come down somewhat due to the economic downturn. Given the enormous cost of this relocation I question why the much more environmentally critical extension to Rte 16 is the portion being postponed. Completion to route 16 is crucial, and financing plans should ensure that it is done in the most timely manner possible. Perhaps, if it can't be included safely in the New Starts application, there could be a parallel track of planning and preparation.

S-003-003 I would also like to see in more detail what the Commonwealth's plan to pay for this project is. There is $600 million authorized for this project in the Transportation Bond Bill. However, there is also language that requires the bond authorization to be reduced by the amount of any federal contribution. This would seem to cap the total cost of the project at $600 million which

S-003-001

Both the relocated Lechmere Station and a new Green Line storage and maintenance facility are critical components of the Proposed Project, and need to be fully constructed during the first phase of this Project. Cost estimates developed for the DEIR/EA will be further refined as the Project advances through preliminary engineering.

S-003-002

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. Extension to Mystic Valley Parkway/Route 16 is planned, but cannot be completed by 2014 with the available funding. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

S-003-003

In order to fund any state share of the costs of constructing the Green Line Extension project, MassDOT will need to make use of capital funds raised through Commonwealth bonding. Should the existing bond authorization for the State Implementation Plan projects (of which the Green Line Extension project is one) not be sufficient, MassDOT will need to work with the Legislature and the Executive Office of Administration & Finance to provide additional bond authorization to cover those costs of the Green Line Extension Project for which the Commonwealth is responsible.

S-003-003 | is insufficient. I assume that DOT has the ability to use other capital bond money for this purpose but more information on what funds can and will be used would be helpful.

This is a very important project and I believe that we need to be as clear as possible as to what our options are to ensure that it is fully funded and extends to Rte 16 in the shortest possible timeframe.

Thank you for considering these additional comments. If you have any questions, or if I can be of any further assistance, please do not hesitate to contact me.

Sincerely,



Patricia D. Jehlen
State Senator



The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

DENISE PROVOST
27TH MIDDLESEX DISTRICT
ROOM 167, STATE HOUSE
TEL. (617) 722-2810
FAX (617) 626-0561
Rep.DeniseProvost@state.ma.us

COMMITTEES:
Elder Affairs
Bonding, Capital Expenditures and State Assets
Personnel and Administration

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Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

January 8, 2010

Dear Secretary Bowles,

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project. I commend MassDOT on their efforts in the release of the DEIR, which represents a significant milestone in the public evaluation process of the project. My comments will be organized by topic.

1) Community Participation

S-004-001 It is imperative that MassDOT ensure that an interactive community participation process continue. Specifically, the Massachusetts Environmental Protection Agency (MEPA) should require collaborative planning, with community involvement in the design and engineering of the route, stations, and connections. Senior project staff should commence working out of a centrally located field office to maximize access.

S-004-002 In instances when project mitigation proves insufficient to meet pre-agreed impact standards for noise, vibration, pollution and other environmental burdens, it is essential that the community be consulted in devising solutions.

2) Station Design and Siting

S-004-003 New stations must connect as fluidly as possible, with all other clean modes of transportation, including current and re-routed buses. Each station should accommodate bus drop-off and pick-up (i.e. curb extensions and other roadside adjustments), with maximum integration of transit modes and minimal street disruption. Enhanced bus routes connecting new Green Line stations with proximate Red Line and Orange Line stations should be implemented simultaneously, as was the case with the Red Line northwest extension. Neighborhood shuttle and loop buses should also be added as necessary.

S-004-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

S-004-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

S-004-003

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

S-004-004 Station entrances and exits should be sited to encourage an even distribution of riders along the length of the platform which, as a result, would enhance rider safety.

S-004-005 Stations should be located and configured to maximize pedestrian, bicycle, and wheelchair access to and from adjacent neighborhoods. The Federal Transit Administration (FTA) has proposed a policy change relating to bicycle/pedestrian access to public transportation, which we should adopt as a planning principle for this project. The proposed policy states:

> For purposes of determining whether a pedestrian or bicycle improvement as a physical or functional relationship to public transportation, regardless of whether it is funded as a capital project or public transportation enhancement, all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation. According to a test of activity and use, pedestrian and bicycle improvement is within the distance most people can be expected to safely and conveniently walk or bicycle to use that particular transit service. Federal Registrar: November 13, 2009 (Volume 74, Number 218) http://edocket.access.gpo.gov/2009/E9-27240.htm

S-004-006 Furthermore, both branches of the tracks should be constructed to allow for future extension, should it be warranted – between Lechmere and Washington Street/Union Square, between College Avenue and Route 16, and along a future Green Line extension to Porter Avenue that could serve both Somerville and Cambridge neighborhoods. The specific issue of integrating the Community Path into this project is addressed later on in these comments.

3) Green Line Maintenance Facility Relocation

S-004-007 The siting of the proposed maintenance facility and storage yards should not increase existing transportation infrastructure and environmental burdens in Somerville or interfere with local economic development. MassDOT should abandon its proposal to place the facility in "Yard 8," and devote no more time and resources to studying this location. It is shocking that DOT should even consider placing such a facility where abutting residents would be subjected to the air pollution it will generate during construction, and beyond.

The Yard 8 proposal is equally outrageous when judged by its economic development and land use impacts on the City of Somerville. With other city officials, I have expressed to DOT on many occassions opposition to the Yard 8 siting, which would preclude the re-development of one of the few areas in Somerville suitable for expanding the City's commercial tax base. While it is hard to fully evaluate "Option L" from the scanty analysis it receives in the draft EIR, its elimination of commercially taxable land, already yielding annual revenue of close to a quarter of a million dollars, would seem to represent more negative impact that could in any way be overcome.

To put the question of maintenance facility siting in context, it is important to note that the MBTA is the largest property owner in Somerville, owning 2,803,380 square feet of land out of the city's modest total of 116,252,928 square feet. The Boston Engine Terminal alone, taxed at Somerville's Fiscal Year 2010 commercial tax rate ($10.44/K), would yield $706,567 in gross revenue this year, in a city under serious fiscal constraint. The inadequacy of the DEIR's land use planning and economic development analysis may be gauged by its insensitivity to scale of fiscal impact, in a city the size of Somerville, posed by locating a maintenance facility in "Yard 8," or even "Option L" location. Additionally, the "Yard 8" facility design includes a 100-car employee parking lot – clearly an unfair economic imposition, and land use detriment to Somerville.

S-004-004

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

S-004-005

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

S-004-006

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and

The environmental and economic detriment to Somerville from being overburdened with transportation infrastructure vastly outweighs the meager public transportation resources it enjoys. Even completion of the Green Line Extension, that long overdue amenity, will not compensate for the existing burden on Somerville's land, let alone the construction of additional regional transportation infrastructure. Between tracks and the Boston Engine Terminal (BET), Somerville – one of the smallest municipalities in the Commonwealth – has long borne the brunt of providing commuter rail service not just to much of Eastern Massachusetts, but to Rhode Island as well.

Putting the maintenance facility on the other side of the BET from the "Option L" site, at the "Mirror H" location, would help to alleviate the historic injustices described above, as well as others resulting from a series of siting and design decisions by the state and other public agencies. Approximately 4 ½ acres of Somerville land at North Point are cut off from the rest of Somerville, and from vehicular access to it. This physical isolation of what would otherwise be valuable, developable land, is the result of cumulative land use decisions: the alignment of the McGrath/O'Brien Highway and of elevated I-93 and the location of the BET and related rail infrastructure.

Locating a maintenance facility on Somerville's North Point acreage probably represents the most minimal deprivation of our developable land. The negative impact of "Mirror H" identified in the EIR – "renegotiation of MBTA – North Point agreement" – would seem to be fairly spurious. The original signatories to that Agreement, locked in litigation for years, are no longer pursuing the North Point development, and have been unable to find a buyer for it. The "agreement" to relocate the Lechmere MBTA station, inter alia, is so dead that the state has assumed, in its recent amendment to the Regional Transportation Plan (RTP), that the Commonwealth must take on the cost of the state relocation, accounting for approximately $150,000,000 in additional project costs.

S-004-008 While it has been assumed, in the DEIR, that it is necessary to locate a regional maintenance facility and car storage areas in Somerville, I am convinced this would be a misuse of precious urban land. I would urge a scale back of such facilities to a size that truly reflects local need. Land use planning and economic development considerations need to be factored into this analysis in a more robust and thorough manner.

4) Integration of the Community Path

S-004-009 I have seen many opportunities lost, and time and public treasure squandered, by the failure to integrate the design and execution of interconnected public works projects. The stubborn refusal of project engineers on the Lowell Street Bridge reconstruction project to consider community testimony and institutional knowledge about plans for the Green Line and Community Path extensions is one example of such waste, which must now be remedied. It is important to recognize the design phase of the Green Line extension as an opportunity to integrate and complete the Community Path with is, as a single, elegant, multi-modal transportation corridor.

I recommend to your attention the detailed, helpful comments of Somerville resident Alan Moore on this subject.

5) Conclusion

S-004-010 I enthusiastically support the Green Line extension project. I am grateful for the commitment to the project displayed by EOT, and its successor agency, MassDOT, as well as by EOEEA, its MEPA unit and DEP in its SIP oversight capacity. I applaud the thoughtful comments made by the City of Somerville, and

infrastructure design with conceptual future Green Line additions and extensions.

S-004-007

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

S-004-008

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

S-004-010 by Somerville STEP. I respectfully request that you require MassDOT to issue a Final EIR which is reasonably complete, describes all alternatives, and complies with all the criteria in your certificate.

The recapitulate my understanding of your requirements, I would look for:

- The employment of "Smart Growth" criteria in land use planning;
- Direct public infrastructure investment to spur revitalization of previously developed urban sites;
- A plan from MassDOT which is consistent with local and regional growth management plans;
- Consistency and coordination with existing land use plans, such as integration of the Community Path, with its full funding addressed;
- Employment of principles of environmental justice; ensuring that no segment of the population bears a disproportionate burden of environmental impacts.

S-004-011 Finally, I would ask that, in the FEIR, MassDOT be required to describe the air quality benefits associated with the project as a whole, and with each phase of its construction.

Thank you for considering these comments.

Very Truly Yours,

Denise Provost

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

S-004-009

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

S-004-010

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

S-004-011

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.



The Commonwealth of Massachusetts

HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

CARL M. SCIORTINO JR.
REPRESENTATIVE
34TH MIDDLESEX DISTRICT
ROOM 134, STATE HOUSE
TEL. (617) 722-2400
FAX (617) 626-0127
E-Mail: Carl.Sciortino@state.ma.us

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COMMITTEES:
Transportation, Vice Chair
Ways and Means
Health Care Financing

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing in regards to the proposed MBTA Green Line Extension to Medford and Somerville. As you may know, much of the proposed project runs through both communities in my legislative district. As such, I have had the opportunity to attend nearly every public meeting on this project over the past five years, and appreciate the opportunity to share my comments with you on the Draft Environmental Impact Report.

S-005-001 It is my firm belief that the green line extension will be a major benefit for my communities, and for the environmental health of the region. There is no transportation project currently in the pipeline in the Commonwealth that comes anywhere near the environmental benefits that the green line extension will facilitate. I look forward to completion of the entire project, from Lechmere all the way to both Union Square and Route 16 by December 31, 2014, and share my comments below in light of that goal.

DEIR Not Final

S-005-002 I am strongly urging you as Secretary to require the entire scope of work be completed that was outlined in your original Certificate on the EENF in December 2006. That Certificate called for a number of items to be studied that have not been adequately addressed by this DEIR. Specifically, the DEIR identified the Route 16 extension as the preferred alternative, but study of this alternative is not complete.

The EENF Certificate made it clear what would be required to allow the DEIR to be the final document: "If the DEIR provides a reasonably complete and stand-alone description and analysis of the project, project alternatives and environmental impacts, and adequately addresses mitigation, the regulations allow the DEIR to be reviewed as a FEIR." Many significant questions remain, and I do not believe the threshold for accepting the DEIR as the FEIR has been met.

S-005-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

S-005-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

S-005-003 I know there has been a suggestion made to complete the DEIR through College Avenue, and do a separate review for Route 16 at a later date. I disagree with this proposal, as I believe the separation into two phases will ultimately lead to the failure of the project to be completed in its entirety to Route 16, the stated preferred alternative. To not complete the analysis of the Route 16 terminus at this time would be a violation of the commitment made by this administration to our communities, and would violate the requirements laid out by your EENF Certificate.

Moving forward, I urge you to reject the current draft as final, and to require a supplement to DEIR. This supplement should address all of the elements laid out in the EENF Certificate, including a full analysis of the preferred alternative, including the Route 16 segment, as well as other issues raised below. I urge you to not allow the current DEIR to serve as the final document, to not allow the separation of the project into two phases in violation of the EENF Certificate's scope of work and project deadline, and to seek an end product that meets the legal requirements of this project.

Route 16 Terminus

S-005-004 The preferred alternative, extending the green line all the way to Route 16, would result in the biggest reduction in vehicle miles traveled and the best improvement in air quality. I fully support making the extension to Route 16 a reality in the timetable required by the SIP Commitments the Commonwealth has made to Medford and Somerville.

The Dept. of Transportation has suggested that this project could be split into two phases, phase I to College Ave by Dec. 31, 2014, and Phase II to Route 16 at a later date. This is being proposed not because there is value in splitting the project, but purely for reasons of fiscal constraints. There are several problems with this approach.

S-005-005 First, the DEIR does not address how the College Ave station can adequately serve as a temporary terminus station for an indefinite length of time. There are additional considerations for a terminus station which have not been incorporated into the design of the College Avenue Station.

S-005-006 Second, the DEIR fails to acknowledge public concern, which I share, that stopping the project at College Avenue does not meet the legal requirements of this project to extend the green line to the Medford Hillside neighborhood. The revised SIP Regulations (310 CMR 7.0) call for the completion of the entire project, "opened to full public use," from Lechmere to Medford Hillside. Others are submitting further details on the subject, including detailed maps and analysis, but in short the Medford Hillside neighborhood is located beyond half a mile at a minimum from the College Avenue Station, and outside of that station's walkable encatchment area. In looking at the history of this project, the Beyond Lechmere Northwest Corridor Study showed the Winthrop Street Station encatchment area indicating the "Medford Hillside" neighborhood, with College Avenue as a separate station (see https://www.commentmgr.com/Projects/1228/docs/MIS8-05-AppendixB.pdf, Figures B6 and B7).

S-005-007 And third, splitting off the Route 16 extension to an unspecified later date disregards the reality that the Route 16 Station has the best air quality benefit, which is the primary purpose of the legal commitments. The Route 16 station has connectivity to bike and pedestrian paths along the Alewife Brook Parkway and Mystic River, and is situated in the middle of a dense neighborhood with potential for ridership numbers that I believe would be much higher than even the very promising projections in the DEIR. In the EENF

S-005-003

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

S-005-004

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

S-005-005

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch.

S-005-007 Certificate, the following was indicated regarding the terminus: "I note that the regulations do not specify the terminus of the line within Medford Hillside and final project designs will be dependent upon the attainment of specific emissions reductions." Stopping at College Ave, without inclusion of Route 16 by the Dec. 2014 deadline, does not attain the strongest reduction in emissions.

S-005-008 Additionally, the current station design at Route 16 is flawed. Throughout this process, we have sought to minimize land takings and impacts on abutters. Representatives from DOT have indicated the plan presented in the DEIR is a "worst case scenario" and indicated they have considered alternatives that do not have the dramatic impacts on businesses at the terminus location as is shown in the current design. The Secretary should require DOT to meet the requirements of the EENF Certificate, and produce design alternatives that minimize disruption to existing businesses, minimize land takings, and enhance economic development potential at Route 16.

Winthrop Street Station Omission

S-005-009 The Secretary's EENF Certificate called for the study of potential stations at College Avenue and Winthrop Street, in addition to Route 16, at the end of the line. As an alternative, requested by community members, the Certificate called for a study of the possibility of combining the College Ave and Winthrop Street stops into a single combined stop.

Having attended every advisory group meeting and neighborhood station meeting, as well as having reviewed all of the public comments submitted as a part of that process, I have serious concerns about the DEIR's recommendation in this area.

The combined College Ave/Winthrop St station concept, when presented at neighborhood meetings, raised many questions and concerns of abutters. It was desirable by most that spoke and commented to not move forward with the combined approach. However, rather than continuing to study the separate College Ave and Winthrop St stations as separate stations, the project team has taken the opinion that simply doing a single College Ave station was the desired option. That is not the predominant opinion that was expressed through this process. There are unique challenges in the entire corridor between College Ave and Route 16, but those appeared to be surmountable, and worthwhile.

The complete loss of an additional station without adequate or credible explanation cannot be allowed, and is not in compliance with the EENF Certificate. I believe the design and analysis of the Winthrop Street station also needs to be completed. As stated above, the current DEIR should not stand as the FEIR, and the Winthrop St. Station analysis also needs to be included in the FEIR.

Maintenance Facility

S-005-010 Unlike the Route 16 Station, which has received little attention, the planners in DOT have given a great deal of time and attention to the Maintenance Facility location and design. It is critically important to the economic development potential of Somerville, as well as the quality of life of abutters in the Brick Bottom community, to make sure this is brought to a positive resolution. Unfortunately, we are not there yet with an adequate alterative, and this further adds to why I believe the DEIR cannot serve as the FEIR.

Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

S-005-006

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

S-005-007

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

S-005-008

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may

Lechmere Relocation

The Commonwealth has an obligation to complete the green line extension, and in order to do this, the existing Lechmere Station must be moved over McGrath O'Brien Highway. The original cost of this relocation was meant to be covered by private developers at North Point, which over the course of the environmental review has fallen apart. This leaves the Commonwealth with a financial challenge for this project, and current plans call for the cost of the Lechmere relocation to be included in the green line extension project costs.

This additional $111 million expense is nearly the same as the projected cost in current dollars of the College Ave to Route 16 segment of the project. The Lechmere relocation is not just a benefit to enabling the green line extension, but also helps ensure the economic potential of the North Point development, and the burden of the relocation should not be bourn solely through the loss of Route 16.

S-005-011 It is my belief that we need to find creative solutions to paying for the Lechmere relocation, and redirect this portion of the budget to complete the Route 16 segment on time. I would urge the Secretary to continue to work with the Secretary of Housing and Economic Development and Secretary of Transportation. The North Point development, if revived at some point in the future when economic circumstances are more favorable, stands to benefit immensely from the relocated Lechmere Station. The original commitment should not be overlooked as mitigation in future developments.

Air Quality

S-005-012 In determining whether this project meets the requirements of the revised SIP Regulations, we need to understand whether the air quality reduction of the green line extension, in combination with the other SIP Commitments, is adequate to meet the required 110% air quality benefit compared to the original SIP commitment package.

I will defer to others who have conducted an analysis of this question, specifically testimony being submitted by the Conservation Law Foundation, which suggests uncertainty on this point. Until we can bring resolution to this question, which is at the heart of the project's purpose, I would contend that the EENF Certificate's requirements have not been met, and further demonstrate the need to reject this DEIR as the FEIR, and move ahead with requiring supplemental analysis and submissions to complete this work.

Conclusion

S-005-013 As a Representative of the project's study area, I have seen community understanding and support for this project evolve rapidly in the past two years. Many steps have been taken to reach out to stakeholder groups, neighborhoods, abutters, and community members, such that by the conclusion of this environmental review I believe there is a much fuller understanding of the project than previously existed. I applaud efforts that have occurred in the past two years to increase outreach and awareness, and to be responsive to neighborhood concerns.

With that said, I believe the scope of work required by the EENF Certificate has not yet been met. More work needs to be done to particularly around the station design of the terminus at Route 16 before many in our community can commit their support to the preferred alternative. Nonetheless, I believe the

achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

S-005-009

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

S-005-010

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. However, the relocation of Lechmere

benefits of the full extension of the green line to Route 16 are well worth the extra work required in the short term, and I urge you to work with Secretary Mullen and the Department of Transportation to expedite the work needed to satisfy the requirements for a final environmental impact report.

Sincerely,



Carl Sciortino
State Representative

Station is a vital component of the Green Line Extension Project and is necessary in order to comply with the SIP commitment.

S-005-011

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

S-005-012

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

S-005-013

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

The Commonwealth of Massachusetts
House of Representatives
State House, Boston 02133-1054

TIMOTHY J. TOOMEY, JR.
STATE REPRESENTATIVE
26TH MIDDLESEX DISTRICT
SOMERVILLE - CAMBRIDGE
ROOM 238, STATE HOUSE
TEL: (617) 722-2380
FAX: (617) 722-2847
Rep.TimothyToomey@hou.state.ma.us

COMMITTEES:
RULES
PUBLIC SAFETY & HOMELAND SECURITY
PUBLIC HEALTH

January 7, 2010

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MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

As the State Representative representing East Cambridge and East Somerville, including the Northpoint parcel in Cambridge and the Inner Belt and Brickbottom areas of Somerville, I am writing to offer my comments on the Green Line Extension Project's Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) and its impact on my constituents.

The Green Line Extension holds the promise to be a major boon to Cambridge, Somerville, Medford and the entire Commonwealth; however, it is essential that the project not be carried out in a way that will negatively impact the safety of commuters, the quality of life of neighbors, or the economic development of the surrounding communities.

In this light I am strongly supporting Alternative "Option L" for the maintenance facility, increased pedestrian safety measures and access for the new Lechmere station and the Brickbottom station, and increased mitigation for the residents of Brickbottom Artists Association and Glass Factory Condos.

Over the past eighteen months, I have repeatedly stressed to the Governor, the Executive Office of Housing & Economic Development, and the Executive Office of Transportation (EOT – now the Massachusetts Department of Transpotation or MassDOT) that the Inner Belt and Washington Street area is ripe for economic development and residential growth

opportunities. My experience as a state and local elected official has provided me extensive experience working on zoning and land use issues. Simply stated, the Inner Belt and Washington Street have the potential to become a focal point of economic vibrancy and community development for the region, and I cannot support any project that would significantly undermine this potential.

For these reasons, Mayor Curtatone along with my colleagues in the Somerville legislative delegation and I have vehemently voiced our objections to locating a Green Line maintenance facility at Yard 8 to Governor Patrick and EOT/MassDOT. Locating a maintenance facility at Yard 8 would inhibit the growth potential of this area and runs counter to the purpose and vision for Green Line expansion. My goal has been, and continues to be, bringing transportation officials together with economic development leaders to ensure that the siting of the maintenance facility does not have a detrimental impact on future mixed use development.

S-006-001

Placing the maintenance facility at the site of so-called "Option L," further away from the Brickbottom community, is more compatible with preserving the development potential of East Somerville while still allowing for system connectivity. Option L also mitigates the disruptive impact that the maintenance facility would have on the densely populated residential community at Brickbottom. While I still have reservations about Somerville bearing the burden of another MBTA industrial use, Option L should receive serious consideration as the maintenance facility site.

It is my firm belief that the long-term economic development benefits to Somerville and the Commonwealth as a whole will significantly outweigh any additional costs associated with Option L. While locating the maintenance facility at Yard 8 would have substantial negative consequences for both the abutters and the City of Somerville, siting the facility adjacent to the existing Boston Engine Terminal would be compatible with Somerville's vision for revitalization of the Inner Belt area.

S-006-002

The "Mirror H" site on the Cambridge-Somerville line is also being considered for the maintenance facility site. I have concerns, however, that placing the maintenance facility at this location is not an adequate solution to mitigating the environmental and financial impacts of the facility. Rather than addressing the negative impacts of the facility, it seems to shift the potential noise pollution, detrimental effects on economic development and growth, and other harmful byproducts of the facility to another community.

S-006-003

I also want to urge you to consider the necessity of providing safe and convenient pedestrian access to both the new Lechmere Station and the Brickbottom Station.

The relocation of Lechmere station across the McGrath/O'Brien Highway to the Northpoint parcel means that thousands of commuters from East Cambridge will now be required to cross a major, multi-lane highway to access the Green Line. It is imperative that the protection of these commuters is a top priority for the Commonwealth, and that we ensure that pedestrian access from the south of McGrath is consistently and reliably safe.

S-006-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

S-006-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

S-006-003

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs are consistent with the approved NorthPoint development plans, and will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

S-006-003 I am not satisfied that a simple signaled crossing meets these standards, and I have strongly urged EOT/MassDOT to put more robust measures in place to protect riders coming from Cambridge.

S-006-004 While I understand that the current Lechmere Station is barely at 10% design, there seem to be significant differences compared with other new stations on the extension. Access points into the station have continually been a concern, and the design should be consistent with other stations being developed. At this point in the process, it appears the Lechmere Station is being short-changed when it comes to Charlie Card access and sufficient protection of commuters from the elements.

S-006-005 Additional planning and mitigation also needs to be considered for the residents of the Glass Factory Condos, where the elevated track will run within feet of their windows.

In short, the new Lechmere Station should be a structure the neighborhood can be proud of after many decades dealing with the flaws and inefficiencies of the current station.

S-006-006 Additionally, it is important to me and to the residents of the East Somerville that the accessibility of the planned Brickbottom Station is maximized by providing access from each side of Washington Street. Pedestrian access should similarly be maximized to facilitate and encourage rail use in the surrounding neighborhood.

Thank you for the opportunity to provide comments on the DEIR/EA. I look forward to continuing to work with you and the neighborhoods I represent to realize a successful Green Line Extension and its integration into our communities.

Sincerely,

Representative Timothy J. Toomey Jr.
26th Middlesex District

cc: Governor Deval Patrick
Secretary Jeffrey Mullan, MassDOT
Secretary Gregory Bialecki, EOHED

S-006-004

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

S-006-005

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. As reported in FEIR Section 5.4, the existing outdoor-to-indoor noise reduction of the Glass Factory Condominiums has been measured and the resulting interior noise level projections have been assessed against appropriate interior noise criteria. Recommended mitigation measures are specified in Chapters 5 and 8 of the FEIR. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

S-006-006

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

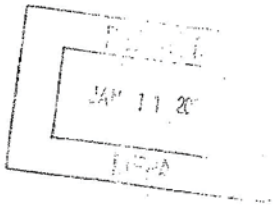
original that arrived after 1/8/10 HJ

Massachusetts Bay Transportation Authority

Deval L. Patrick, Governor | Timothy P. Murray, Lt. Governor | Jeffrey B. Mullan, Secretary & CEO | John R. Jenkins, MassDOT Board Chair | William A. Mitchell, Jr., Acting General Manager and Acting Rail & Transit Administrator

January 8, 2010

Secretary Ian Bowles
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114
Attn: Holly Johnson, MEPA Office



Re: Green Line Extension Project
Draft Environmental Impact Report
EEA #13886

Dear Ms. Johnson:

The MBTA appreciates the opportunity to comment on the Green Line Extension Project. The extension of the Green Line is a major undertaking that is currently being led by the Massachusetts Department of Transportation (MassDOT), and the Authority is actively engaged with MassDOT on this project.

S-007-001

The project is a commitment of the Commonwealth under the State Implementation Plan (SIP) and as a result, the MBTA is fully committed to working to see the project advance into service as quickly as possible. More importantly, however, the project will provide significant transportation benefits to the MBTA's customers in the Somerville and East Cambridge areas. These neighborhoods are highly transit dependent communities and rely heavily on the MBTA bus system. By providing Green Line service, these customers can have direct access to the central subway system and realize a much more efficient transit path. Additionally, by diverting customers from the bus system, we improve capacity and operations of the bus network for the many people who will continue to use that service. The Green Line Extension project provides significant improvements to a large network of customers, and the MBTA strongly supports this project.

S-007-002

MassDOT has been working to advance this project as quickly as possible. As the design advances, the MBTA will become the lead agency on the project and will ultimately be responsible for the construction and obviously the operation of the service. While the MBTA will be the lead for these phases, MassDOT will remain closely involved. Both the MBTA and MassDOT are fully committed to working with the same level of commitment to complete the project.

Maintenance Facility:

S-007-003

A significant portion of both the Draft EIR and the public discussion about the project focuses on the siting of a needed Green Line vehicle maintenance and storage facility. MassDOT has reviewed several possible locations for the maintenance facility. In December, MassDOT released additional information on potential maintenance and storage facilities. The MBTA understands that the siting decision for such a facility is a controversial one and that many factors must be weighed in deciding

Moving Massachusetts Forward. massDOT Rail & Transit

Massachusetts Bay Transportation Authority, Ten Park Plaza, Boston, MA 02116-3974

S-007-001

The Project's Purpose and Need is described in DEIR/EA Chapter 2, Purpose and Need. The Project is needed to comply with the State Implementation Plan (SIP), which includes requirements for this Project as well as other transit projects to meet the air quality and transit commitments established as a result of the Central Artery/Tunnel project.

S-007-002

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

S-007-003

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

S-007-003 where to site the facility. The MBTA adamantly believes that a new maintenance facility must be sited in the Somerville area to support this extension. The MBTA cannot operate this service without a maintenance facility. We appreciate that any abutter to such a facility may experience some type of impacts. The MBTA will work with MassDOT and the abutters to the selected area to avoid or to minimize those impacts to the greatest degree possible.

In its analysis of additional maintenance facility locations, MassDOT provided further assessment of three possible locations for the maintenance facility: Yard 8, the so-called *"Mirror H"* location as well as the so-called *"Option L"* location. In that assessment, MassDOT, after consulting with the MBTA Green Line operations staff, assessed these three locations for a variety of factors, such as their ability to meet the MBTA's maintenance needs, impacts to overall Green Line operations, costs,

S-007-004 property and community impacts, and several other factors. Upon review of this assessment, the MBTA has concluded that both the Yard 8 site as well as the Option L site are well suited, in terms of size and possible layout, to support the MBTA operations. Both provide adequate space and allow for a well configured maintenance and storage facility. The Option L site also allows for better train movements in and out of the maintenance facility and on to the Green Line tracks. The configuration of Yard 8 would require a reverse move of Green Line trains on to the active track whereas the Option L location would not. It would be preferable to the MBTA to avoid this reverse move but the MBTA can operate under either scenario. The MBTA understands that a variety of factors will influence the final decision on where the maintenance and storage facility should be located and the MBTA will work with MassDOT and the City of Somerville as these decisions are being made.

Stations:

MassDOT has identified seven locations for new stations along the line (including a newly relocated Lechmere Station). The station locations are well located to optimize the MBTA's anticipated ridership demand. The stations have so far been designed to only the most conceptual levels. MassDOT and the MBTA will be advancing the design of the stations and to make sure they are properly sized. For the MBTA, three factors drive the size and design of a potential station:

S-007-005 1. All stations must be designed and built to fully meet not only the Americans with Disabilities Act (ADA) requirements as well as the Massachusetts Architectural Access Board (MAAB) standards but must also meet the standards of the MBTA's settlement agreement with the Boston Center for Independent Living (BCIL). The BCIL standards provide guidance elements that affect the size and footprint of the stations such as elevator location, elevator size, *etc.* In many cases, the BCIL standards are more stringent and more robust than either the ADA or the MABB requirements. Any station design must take the BCIL agreement into account.

S-007-006 2. All stations must meet the applicable National Fire Protection Association (NFPA) standards. These standards can affect the sizing and possible location of stations in regards to emergency access/egress. Emergency standards for both the width of the egress as well as second means of egress are often dictated by code and the MBTA does not have the flexibility to change those standards. Any design concept that does not meet the NFPA cannot be advanced, even if that concept reduces impacts on the surrounding neighborhoods.

S-007-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

S-007-005

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process

S-007-007

3. The MBTA seeks to design and build the most efficient and sustainable stations possible. The MBTA's design goal will be to build stations that function well and are integrated into the surrounding community, while at the same time reducing energy consumption and maintenance needs. Smaller stations require less electricity and energy to power and to light, and also result in lower long term maintenance costs. While larger stations may make a stronger civic statement in a neighborhood, they tend to be more resource intensive when it comes to the long term maintenance and energy consumption.

To a certain degree, these three driving principles conflict with each other. (Fire safety rules often call for a larger station, with more functions, while the sustainable design approach leans towards smaller stations.) MassDOT and the MBTA will work to balance these three principles to result in stations that are fully functional and safe for all passengers, yet reduce resource consumption as much as possible.

Right of Way Issues:

During the public involvement process, a number of comments and ideas have been raised by abutters and community representatives which they believe will help to better integrate the project into their neighborhoods and to reduce impacts. Several of these ideas, however, are in conflict with the MBTA's safety plans or operating needs, and the MBTA feels strongly that they should not be advanced. Most notably, these concerns include:

S-007-008

- The Green Line right of way must be built as a two track system. Abutters have requested that some segments of the right of way be built as a single track system so as to move the trains as far away from the neighborhood as possible and shrink the overall footprint of the system. While we understand the abutters' desire to have as much space as possible between their homes and the tracks, a rapid transit system operating on four- or six-minute headways cannot operate on a single track. Two tracks are a requirement for this type of operation.

S-007-009

- The MBTA feels strongly that there should be no at-grade crossings of the tracks. Community representatives have asked that an at-grade crossing be added near Lowell Street to accommodate the community bike path. The MBTA believes that in the interest of public safety, no at-grade crossings should be included in the project. The MBTA recognizes that several grade crossings currently exist on the western branches of the Green Line (*e.g.*, the B, C and E lines) and some have argued that a different standard is being imposed on the Somerville branches. There are notable differences, however. First, the grade crossings on these existing branches are well integrated into the existing streetscape and have been for nearly a century. Travel patterns and travel habits are well established here; creating new crossings in areas without that extended history and without the abutting streetscape layout is very different, particularly given the relatively high speeds at which trains on the Green Line Extension will be traveling.

  Furthermore, these existing crossings on the western branches are the source of many delays to the Green Line operations. Automobile traffic delays across the intersections or auto accidents at the crossings cause significant delays to the Green Line. Pedestrians crossing in front of the Green Line create a safety hazard that operators must deal with on a regular basis. Since any grade crossing on the Somerville branches would be a crossing not only of the Green Line but

for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

S-007-006

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

S-007-007

MassDOT concurs with the stated MBTA priorities. As described in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, and low-maintenance "green" design.

S-007-008

The conceptual Green Line Extension designs show a two-track configuration at minimum throughout the revenue service alignment.

S-007-009

As presented in both the DEIR/EA and FEIR, it is in accordance with MBTA policy that conceptual designs for the Proposed Project include no at-grade crossings of the Green Line or Commuter Rail tracks.

also the commuter rail line (since the corridor is a shared use corridor) these safety hazards would be magnified. Introducing new crossings creates new safety and operational challenges that the MBTA believes should be avoided.

By way of comparison, the D Line Branch of the Green Line (service to Riverside) is far more comparable to the Somerville extension. Similar to Somerville, that branch was a commuter rail corridor that was converted to light rail in the late 1950's. That corridor has no grade crossings and as such, can reach much higher speeds than the other three surface level branches. These higher speeds are critical to maintaining the headways and throughput that is used on that line. The D Line is also far less prone to service delays since there are no interruptions due to automobiles, pedestrians, etc. Managing the service is much easier on this line, and as a result, service delivery is much better. The MBTA views the Somerville extension as the same type of service. It can be better provided however if there are no grade crossings. .

S-007-010

The MBTA understands that MassDOT will be requesting that the DEIR also serve as the Final EIR. The MBTA strongly supports this request and urges MEPA to require no additional environmental review. The project has been the subject of an extensive public involvement process and that process will continue through the life of the project. The Draft EIR includes a full and complete assessment of the alternatives, including alternatives for the maintenance facility, and a full analysis of the environmental impacts of those alternatives. No additional environmental review issues appear to be left unanswered. The remaining issues, while critical community issues, are not those that are typically addressed in a MEPA process. By allowing the DEIR to serve as the Final EIR, the MBTA and MassDOT can shorten the planning process and move more quickly into advancing the design process. There remain many long lead design issues that the MBTA needs to advance as quickly as possible so as to meet the December 2014 deadline established in the SIP regulation. These long lead items (*e.g.*, signal system design, track design, vehicle procurement, *etc.*) do not result in any new or different environmental impacts, but the MBTA would typically not advance the design until the environmental review process is completed. Reducing the length of time the project is in MEPA will assist the MBTA in meeting the SIP regulation date.

The MBTA appreciates the opportunity to review and comment on this project. Our continued involvement is obviously critical to keep the project on schedule and the MBTA is committed to providing that assistance. If you have any additional questions, please do not hesitate to contact me.

Sincerely,

Andrew D. Brennan
Director of Environmental Affairs

S-007-010

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

dcr
Massachusetts

RECEIVED

JAN 8 2010

MEPA

January 8, 2010

Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs
Attn: Holly Johnson, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EOEEA #13886, Green Line Extension Project

Dear Secretary Bowles:

The Department of Conservation and Recreation ("DCR" or "Department") is pleased to submit the following comments in response to the Draft Environmental Impact Report ("DEIR") submitted by the Massachusetts Department of Transportation ("MassDOT") for the Green Line Extension Project (the "Project"). The filing concurrently serves as the Project's Draft Environmental Impact Statement ("EIS") and Section 4(f) statement under the National Environmental Protection Act ("NEPA").

The Project envisions extending Green Line service using light-rail vehicles from the relocated Lechmere Station through Cambridge and Somerville, ultimately terminating at Mystic Valley Parkway/Route 16 (the "Preferred Alternative"). Phase One of the Project (the "Proposed Project") would construct the Green Line extension to Medford Hillside, while Phase Two is proposed to extend to Mystic Valley Parkway/Route 16. The Project would include construction of new tracks and stations; re-location of existing commuter rail tracks; relocation, removal and/or elimination of freight track rights; reconstruction of bridges; and construction of a maintenance storage facility.

Changes Since EENF

The Certificate for the Expanded Environmental Notification Form ("EENF") was issued in December 2006. Initially, DCR's interest in the Project centered on potential impacts to McGrath Highway and Monsignor O'Brien Highway (previously under DCR's care and control), as well as the proposed terminal station adjacent to DCR's Mystic Valley Parkway/Route 16. However, two notable changes have occurred since the EENF review that will greatly reduce DCR's role in the immediate future of the Project.

S-008-001

First, under transportation reform legislation passed in 2009 (Chapter 25 of the Acts of 2009), and a Memorandum of Understanding executed by DCR and the newly created MassDOT, care and control of various parkways, including McGrath Highway and Monsignor O'Brien Highway, was transferred from DCR to MassDOT. As a result, DCR expects to have minimal involvement in these areas and will not be involved in coordinating activities with the Proponent in these locations.

Second, due to funding constraints, and in order to ultimately implement its Preferred Alternative, the Proponent has divided the Project into two distinct phases. Under Phase One of the Project ("Phase One"), the Green Line would be extended to Medford Hillside near College Avenue, in the vicinity of Tufts University. Phase Two of the Project ("Phase Two") would focus solely on extending the Green Line from College Avenue to Route 16/Mystic Valley Parkway.

COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

Department of Conservation and Recreation
251 Causeway Street, Suite 600
Boston MA 02114-2119
617-626-1250 617-626-1351 Fax
www.mass.gov/dcr

Deval L. Patrick, Governor
Timothy P. Murray, Lt. Governor
Ian A. Bowles, Secretary, Executive Office of Energy & Environmental Affairs
Richard K. Sullivan, Jr., Commissioner, Department of Conservation & Recreation

S-008-001

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

EOEEA #13886
Page 2 of 2

Phase Two

S-008-002

DCR requests the Proponent coordinate planning activities for Phase Two of the Project with the Department as significant planning efforts have been undertaken to improve public access and amenities, particularly involving bicycle and pedestrian paths along the Mystic River. In addition to the Mystic Valley Parkway, DCR owns parkland along the Mystic River in the vicinity of the proposed Mystic Valley Parkway station (the "Station"). DCR is constructing a bike path along Alewife Brook adjacent to Route 16 that will link the Minuteman Bike Path and adjacent neighborhoods to the Mystic River. In addition, DCR has developed a Mystic River Reservation Master Plan that makes specific recommendations for improvements from Route 99/Alford Street Bridge to the Mystic Lakes in Winchester, Arlington, and Medford. DCR is pleased the Proponent makes specific reference to these activities in the DEIR and notes the importance of integrating the pathway with the design of the Phase Two station to encourage safe and multi-modal access. DCR recommends the Proponent continue its coordination with the Department when planning Phase Two of the Project, particularly with regard to designing the station to encourage multi-modal transportation.

Prior consultations between DCR and the Proponent assumed the construction of a 300-space parking garage at Mystic Valley Parkway/Route 16. It is DCR's understanding that the Preferred Alternative does not include construction of this garage. Because of such a structure's potential impacts to DCR parkland and parkways, DCR requests that the Proponent consult with the Department regarding the parking garage if the Preferred Alternative is modified to include the 300-space garage.

S-008-003

DCR notes that by separating the Project into two phases, there is a possibility that Phase Two will not separately meet federal cost/benefit criteria for funding. Accordingly, if Phase Two is not funded, and the Phase One interim condition becomes permanent there may be impacts associated with increased vehicular traffic on DCR Parkways if transit users who would have been within walking distance of the Mystic Valley Parkway/Route 16 station now become drop-off users at College Avenue. DCR requests that the FEIR identify any long-term impacts to DCR parkways associated with Phase One in isolation, when compared to implementing Phase Two.

Thank you for this opportunity to comment. If you have questions or need further information regarding traffic impacts to Mystic Valley Parkway, please contact Ken Kirwin at 617-626-1498 or ken.kirwin@state.ma.us. If you have questions or need further information regarding the Mystic River Master Plan or DCR's planned infrastructure improvements along the Alewife Brook and Mystic River corridors, please contact Dan Driscoll at 617-626-1438 or dan.driscoll@state.ma.us.

Sincerely,



Richard K. Sullivan, Jr.
Commissioner

cc: Katherine Fichter, MassDOT
Laura Dietz, Nick Gove, Joe Orfant, Samantha Overton, Nathaniel Tipton (DCR)

S-008-002

At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues. MassDOT will continue to coordinate with state and local agencies as this phase of the project progresses.

S-008-003

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. No impacts to DCR Parkways are anticipated from using College Avenue Station as a terminus.

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner



January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, 9th floor
Boston, MA 02114

Attn: Ms. Holly Johnson, MEPA Analyst

RE: The Green Line Extension Project DEIR/EA EEA#13886

Dear Secretary Bowles:

The Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Prevention staff in Boston has reviewed the DEIR/EA submitted by EOT (now MassDOT) regarding the proposed Green Line Extension Project and offers the following comments.

Air Quality Requirements

The proponent identifies the proposed project as Alternative 1. As presented and evaluated in the DEIR/EA, Alternative 1 includes: 1) the Green Line Extension to a College Avenue, Medford terminus using the Fitchburg and Lowell commuter rail right of way; 2) a spur to Union Square in Somerville; and 3) seven new "neighborhood' stations, designed for local bicycle and pedestrian access without commuter parking. The proposed Green Line Extension from Lechmere Station to Medford Hillside and the Green Line Union Square spur of the Green Line are required transit projects pursuant to MassDEP's Transit System Improvements regulation, 310 CMR 7.36, subsection (2) (j) 1. and 2., respectively. Consistent with 310 CMR 7.36, the completion date for the project is December 31, 2014.

Alternative 1 and the analysis contained in the DEIR/EA are consistent with and meet the emission reduction requirements that are required under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the Massachusetts State Implementation Plan (SIP).

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD# 1-866-539-7622 or 1-617-574-6868.
MassDEP on the World Wide Web: http://www.mass.gov/dep
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The DEIR/EA also identifies a second preferred alternative, subject to future funding. The "Future Full Build Alternative 2"contains all the elements of Alternative 1 and includes an extension of the Green Line beyond College Avenue to Mystic Valley Parkway/Route 16. The proponent indicates the preferred alternative was fully evaluated in the DEIR/EA, but is not presently programmed or funded for completion by 2014.

S-009-001 While not required by 310 CMR 7.36, MassDEP strongly supports the proponent's continuing efforts to extend the Green Line beyond College Avenue to Mystic Valley Parkway/Route 16 as soon as funding is secured. MassDEP concurs with the proponent that the Future Full Build Alternative 2 would provide additional regional air quality benefits.

Project Mobile Source Air Quality Analysis

The DEIR/EA included a mesoscale analysis to estimate area-wide emissions of volatile organic compounds (VOC), oxides of nitrogen (NOx), carbon dioxide (CO2), carbon monoxide (CO), and particulate matter (PM10). The DEIR/EA also included a microscale analysis of CO, PM10, and PM2.5 emissions. The air quality analysis compared 2007 No Build conditions with 2030 Build conditions for six project alternatives. The project proponent consulted with MassDEP in the development of the project modeling protocols. The analyses compared area-wide vehicle miles travelled (VMT) reductions based on new ridership projections for each alternative. The 2030 ridership estimate for Alternative 1 project is a result of a shift of existing transit riders from other transit modes and an increase of new transit ridership systemwide. By 2030, ridership for Alternative 1 is estimated at 52,000 daily boardings and alightings at the seven proposed stations, of which 7,900 are new transit trips. This reflects an area-wide reduction in VMT of 25,018.

DEIR/EA Sections 5.6.4 and 5.6.5 describe the model inputs and results for the mesocale analysis for each project alternative compared with the No Build condition. Changes in emissions are based on average daily traffic volumes, roadway lengths, and vehicle emission rates. The mesoscale analysis estimates the proposed Alternative 1 Build condition compared to the No Build condition in 2030 would result in an area wide emissions decrease of 17,115 kg/day for CO2, 7.6 kg/day for VOCs, 4.4 kg/day for NOx, and 0.8 kg/day for PM10.

The results of the microscale analysis for the proposed Alternative 1 Build condition compared with the No Build condition in 2030 were below the applicable National Ambient Air Quality Standards (NAAQS) for CO, PM10, and PM2.5.

Layover/Maintenance Facility

MassDEP recognizes the necessity for a layover and maintenance facility to support the proposed project. The DEIR/EA has identified the Yard 8 site as the preferred layover and maintenance facility. However, the project proponent is aware of Somerville's concerns for this
S-009-002 particular site and is exploring alternate sites nearby. MassDEP recommends that the proponent and the City continue working together to achieve an acceptable solution and to keep the project on schedule.

S-009-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

S-009-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Community Paths

S-009-003 As required by the MEPA Certificate, the DEIR/EA contained conceptual designs for the Somerville Community Path and a feasibility study for the Medford Community Path. The Community Paths would provide important bicycle and pedestrian linkages to the project that would likely increase transit ridership resulting in greater air quality benefits. Therefore, MassDEP recommends that the proponent and the Cities of Somerville and Medford continue working together to coordinate Path design and construction where feasible.

Construction Air Quality

S-009-004 The proponent has committed to require all project contractors to install after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). MassDEP commends the project proponent for committing to install these devices to reduce diesel engine emissions. MassDEP's guidance document, "Diesel Engine Retrofits in the Construction Industry – A How to Guide", is available on MassDEP's website at http://www.mass.gov/dep/air/diesel/conretro.doc.

The proponent has committed all project contractors to use low sulfur diesel (LSD) fuel while 15-ppm fuel is referred to as ultra-low sulfur diesel (ULSD) fuel as required in 2010.

Compliance with the Massachusetts Idling Regulation

S-009-005 The proponent is committed to posting idling restriction signs on project construction sites to remind all drivers, construction workers, and delivery personnel of MassDEP's idling regulation, 310 CMR 7.11. This regulation prohibits motor vehicles from unnecessarily idling their engines more than five minutes. MassDEP recommends the proponent provide MBTA employee training and MBTA Police enforcement of the regulation on all MBTA property. Questions regarding this regulation should be directed to Julie Ross of MassDEP at 617-292-5958.

The MassDEP appreciates the opportunity to comment on this proposed project. Please call or contact Jerome.Grafe@state.ma.us, 617-292-5708 if you have any questions.

Sincerely,

Christine Kirby
Acting Division Director,
Division of Consumer and Transportation Programs

S-009-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

S-009-004

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. As stated, all project construction contractors will be required to use low sulfur diesel fuel.

S-009-005

Please see response to Comment S-009-004.

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTHEAST REGIONAL OFFICE
205B Lowell Street, Wilmington, MA 01887 • (978) 694-3200

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Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

January 8, 2010

Ian Bowles, Secretary
Executive Office of Energy and
Environmental Affairs
100 Cambridge Street
Boston MA, 02114

RE: Somerville, Medford,
Cambridge
Green Line Extension
EEA # 13886

Attn: MEPA Unit

Dear Secretary Bowles:

The Department of Environmental Protection has reviewed the Draft Environmental Impact Report submitted by the Massachusetts Department of Transportation (MassDOT) to extend the Green Line mass transit service from the relocated Lechmere Station in Cambridge to the Medford Hillside section of Medford (EEA# 13886). The rail corridor, which would serve the region's most densely populated communities, is proposed along 4.4 miles of railroad right-of-way, following the Lowell commuter rail line to Medford, and the Fitchburg commuter rail line to Union Square in Somerville. The project requires the construction of about four miles of light rail track; new signal, communications, and electrical systems; relocation of existing commuter rail lines; four multi-span viaducts; station platforms; a maintenance/storage facility; traction power substations; an overhead catenary system, and reconstruction of 11 bridges. A relocated Lechmere Station and layover/maintenance facility also are proposed. The Department provides the following comments.

The DEIR also is a federal Environmental Assessment and 4(f) Statement that evaluates six alternatives, including the proposed project, (Alternative 1), from a relocated Lechmere Station to Medford Hillside and Union Square, via the MBTA Fitchburg Line right-of-way, and MassDOT's preferred alternative, (Alternative 2), from a relocated Lechmere Station to Mystic Valley Parkway/Route 16 and Union Square (using commuter rail rights-of-way). Because of funding limitations, the project will be constructed in two phases, Alternative 1 by 2014 and the remaining rail line from College Avenue Station to Mystic Valley Parkway/Route 16 would be constructed at a future date. The project includes seven rail stations; five new stations are proposed at Brickbottom, Gilman Square, Lowell Street, Ball Square, and College Avenue.

Massachusetts Contingency Plan (MCP)/M.G.L. Chapter 21E

S-010-001

Due to the fact that soils along the proposed right-of-way have not been pre-characterized, the proposed frequency of sampling, i.e., every 500 cubic yards, would be

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S-010-001

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

S-010-001 inadequate. From the DEIR, it appears that only the stockpiles generated during excavation would be sampled. There is no mention of sampling prior to excavation, or confirmatory samples of contaminants that may remain on site in the excavation pit. Without up front sampling, it will be difficult, if not impossible, to determine whether there would be the potential for public or worker exposure to harmful contaminants during excavation. Pre-characterization of the soils also is done to identify the suite of contaminants to be sampled. According to the DEIR, asbestos is not listed as a contaminant to be sampled, even though the rail line traverses an old residential neighborhood. It should be.

S-010-002 If no pre-characterization of the soils is planned along the Green Line extension corridor, MassDEP recommends sampling of every 200 cubic yards of soil, including both the piles and in-situ sampling. In addition, confirmatory samples need to be taken. Issues related to the soil sampling need to be addressed prior to the 50 percent design stage of the project, and MassDEP recommends that MassDOT contact MassDEP for consultation on this and other issues raised in this comment, if the FEIR will be submitted at a later stage of design.

S-010-003 MassDEP was unable to find information on soils disposal offsite in the hazardous materials sections of the DEIR. Specific locations for disposal need to be identified and arrangements for disposal must be completed prior to excavation. There also is no explanation of how the soils will be identified and categorized for offsite disposal or re-use on site. Work relating to disposal of the soils is included in the MCP process that must be completed, and related information needs to be submitted to MassDEP, prior to 50 percent design.

S-010-004 The DEIR is silent on how MassDOT plans on notifying MassDEP of reportable concentrations under the MCP. Is this going to be handled as a special project, rather than on a site-by-site basis? MassDEP recommends that the proponent consult with the Department on development of a plan for the notification and close-out issues relating to this project.

S-010-005 In addition, MassDOT needs to develop a plan for groundwater dewatering, irrespective of whether it is contaminated or not. The DEIR statement that a 21,000 gallon holding tank would be used for dewatering is insufficient.

Lastly, the FEIR should clarify the soil clean up that will be achieved. As written in the DEIR, it is not clear what volumes and percentages of the soils will be removed or reused, and the language used suggests that the clean up of contaminated soils would be complete.

Stormwater

According to the DEIR, stormwater from the Green Line track system runs off into ditches and underdrains which convey flow to storm sewers with outfalls into the Mystic and Charles Rivers. These rivers are classified as a Category 5 impaired waterbody on the Massachusetts 2008 303(d) List of Impaired Waterbodies.[1] Both rivers have multiple impairments in the reaches near the project site. Among the pollutants causing impairment are pathogens, low dissolved oxygen, oil and grease, nutrients, total phosphorus, and others in the Charles River; and pesticides, priority organics, inorganics, metals, nutrients, and pathogens,

[1] The Massachusetts 2008 303(d) List of Impaired Waterbodies is available at the following website: http://www.mass.gov/dep/water/resources/08list2.pdf.

S-010-002

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

S-010-003

Please see response to Comment S-010-001.

S-010-004

Please see response to Comment S-010-002.

S-010-005

The need for groundwater dewatering will be determined during preliminary engineering, and an appropriate plan made at that time if necessary. An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination, and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

unionized ammonia, low dissolved oxygen, pathogens, oil and grease, and other pollutants in the Mystic River. Currently, total Maximum Daily Loads (TMDL) have been prepared for the Charles River to address some of the pollutants from point and nonpoint sources, which are causing water quality impairments.

S-010-006

A general approach to stormwater management for the Green Line project is described in the DEIR, which is at a conceptual stage of design. It is requested that the FEIR expand upon the conceptual plans and analysis of stormwater controls to the extent feasible to demonstrate that the drainage system would satisfy the Massachusetts Stormwater Standards, which MassDOT is committed to do, and also achieve requisite USEPA NPDES permit obligations, including MS4 requirements to implement construction site runoff controls, post-construction runoff controls, and pollution prevention/good housekeeping measures, in addition to addressing any applicable Total Maximum Daily Load (TMDL) requirements, which have been established for the Charles River Basin.

The DEIR indicates that a Stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction and that it will include an update to the operations and maintenance plan. The FEIR should assess requirements for coverage under the EPA's NPDES General Permit for Stormwater Discharges from Construction Activities, (Construction General Permit or (CGP)), which controls discharges of pollutants from the site, in order to ensure consistency with the assumptions and requirements of the EPA TMDLs for the Charles River. The SWPPP will need to document the measures being taken to ensure consistency with the TMDLs. The TMDLs for the Charles River Basin are available on the MassDEP website: http://www.mass.gov/dep/water/resources/tmdls.htm.

S-010-007

The DEIR indicates that new train station roof drains would be connected to trunk lines, (page 5-143). However to avoid contributing drainage from some of the new stations, including Brickbottom, Lowell Street, and Gilman Square into combined sewer overflows, MassDEP recommends that station drainage be infiltrated or controlled onsite with low impact development techniques, (e.g., green roofs and/or bioretention basins/rain gardens), where siting is feasible considering soil conditions and contamination levels.

To control drainage in the vicinity of most of the station areas and the maintenance facility, the DEIR indicates that infiltration and/or detention systems would be used. The FEIR should evaluate the feasibility of using unlined infiltration or detention systems, taking into consideration soil and groundwater conditions and contamination levels. The use of an under drain system within the rail ballast also should be evaluated in greater detail to explain how water quality will be controlled, particularly in areas of soil and groundwater contamination.

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Iris.Davis@state.ma.us, at (978) 694-3399 for additional information on waste site cleanup issues and Jerome.Grafe@state.ma.us, at (617) 292-5708 for air quality issues. If you have any general questions regarding these comments, please contact Nancy.Baker@state.ma.us, MEPA Review Coordinator at (978) 694-3338.

S-010-006

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

S-010-007

The DEIR/EA and FEIR include only conceptual Project designs. Designs for each station, the storage/maintenance facility, and the entire project alignment will be refined during the Project's preliminary engineering stage. Drainage from each site will be considered at that time.

Sincerely,

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Phil Weinberg, Jerome Grafe, Steve Lipman, Tom Maguire, MassDEP-Boston
Stephen Johnson, Iris Davis, Nancy Baker MassDEP-NERO

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

RECEIVED
NOV 18 2009
MEPA

November 16, 2009

Richard Doyle
Regional Administrator
Federal Transit Administration
55 Broadway Ste 920
Cambridge, MA 02142

RE: Green Line Extension, Cambridge, Somerville, Medford, MA. MHC # RC.40762. EEA# 13886.

Dear Mr. Doyle:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the Draft Environmental Assessment/Environmental Impact Report (DEIR/EA) And Draft Section 4(f) Evaluation, received October 16, 2009, for the project referenced above and have the following comments.

MHC understands that the preferred project alternative by FTA, Alternative 1, is the Green Line extension to Medford Hillside and Union Square using the existing Massachusetts Bay Transportation Authority (MBTA) Fitchburg right-of-way. However, the Massachusetts Executive Office of Transportation (EOT) has proposed Alternative 2, the Future Full-Build Alternative, Green Line extension to Mystic Valley Parkway/Route 16 and Union Square, as its preferred alternative, to be constructed in two phases.

S-011-001 The DEIR/EA considers identified historic and archaeological resources for the full-build Alternative 2. MHC requests that FTA, in consultation with EOT and this office, complete identification, evaluation and consultation to avoid, minimize or mitigate adverse effects to significant historic and archaeological resources under 36 CFR 800 for the complete undertaking. A programmatic Memorandum of Agreement (MOA) (36 CFR 800.4(b)(2)) to guide future review of potential effects to historic and archaeological resources within EOT's preferred full-build alternative may be considered.

MHC notes that the FTA has developed a draft MOA (Appendix J) for mitigation of adverse effects to the existing Green Line Lechmere Station and Viaduct, listed in the National Register of Historic Places, for which demolition is proposed. MHC has previously reviewed the Lechmere Viaduct rehabilitation (MHC # RC.9602), relocation of the Lechmere Station (MHC # RC.3250) and the North Point development project (MHC # RC.29928, EEA#12650) in 2006 through 2008, for which archaeological survey has been conducted. In MHC's opinion, the development of an MOA prior to the FTA's findings of effect pursuant to Section 106 of the National Historic Preservation Act (36 CFR 800) is premature. The MHC requests that the FTA make a finding of effect and summarize alternatives considered as part of on-going state level environmental review.

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

S-011-001

Section 5.13.2.3 of the DEIR/EA describes the impacts to historic and archaeological resources that would result from extending the Green Line from College Avenue Station to Mystic Valley Parkway/Route 16 Station. However, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. Accordingly, the Proposed Project will not impact historic or archaeological resources in that segment. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. MassDOT will continue to work with FTA and MHC to ensure compliance with NHPA requirements. As noted in the Massachusetts Historical Commission letter of August 5, 2009, a copy of the MBTA Green Line Extension Project Historic and Archaeological Resources Reconnaissance Survey, Cambridge, Medford, and Somerville, Massachusetts was received from FTA on July 10, 2009.

S-011-002 The MHC met with the Cambridge Historical Commission and MBTA representatives in May of 2008 to discuss effects to the Viaduct. Please see MHC's correspondence of 5/22/2008 (see enclosed) for MHC's specific recommendations concerning the Viaduct. Any MOA language should incorporate this recommendation.

S-011-003 Archaeological resources within archaeologically sensitive areas of the full-build project area of potential effect have not yet been identified or evaluated according to the Criteria of Eligibility (36 CFR 60). MHC requests that an intensive (locational) archaeological survey (950 CMR 70) be conducted for those archaeologically sensitive portions of the full-build Alternative 2, including the 24/30 Joy Street, Yard 8 and Middlesex Canal areas, as identified in DEIR/EA Section 5.13.3.2, page 5-155, and the 2009 PAL technical reconnaissance report.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 70-71) and ~~MEPA (301 CMR 11). If you have questions or require additional~~ information please contact Jonathan K. Patton at this office.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

Enclosure: MHC 5/22/2008

xc: Secretary James A. Aloisi, Jr., EOT, Attn: Katherine Fichter
Holly Palmgren, MBTA
Secretary Ian A. Bowles, EEA, Attn: Holly Johnson, MEPA Unit
Somerville Historic Preservation Commission
Medford Historical Commission
Cambridge Historical Commission
Lisa Standley, VHB, Inc.
Deborah C. Cox, PAL, Attn: Suzanne Cherau

S-011-002

The Memorandum of Agreement will incorporate this recommendation.

S-011-003

Section 6.5.4.7 of the DEIR/EA describes how MassDOT will identify and manage archaeological resources, in accordance with state and federal requirements. Intensive archaeological survey may be warranted in some locations, and would be conducted in consultation with FTA and MHC.

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

May 22, 2008

RECEIVED
JAN 13 2010
MEPA

Holly Palmgren
MBTA
10 Park Plaza
Boston, MA 02116-3974

RE: Lechmere Viaduct Rehabilitation, Phase II, Cambridge; MHC# 9602

Dear Ms. Palmgren:

Thank you for meeting with staff at the Massachusetts Historical Commission and the Cambridge Historical Commission on May 20, 2008 for a preliminary discussion of design alternatives for rehabilitation of the steel spans of the Lechmere Viaduct.

Project managers for the rehabilitation presented materials pertaining to reinforcement of the viaduct using an option of all steel and an option of concrete encasement. It was agreed that the MBTA should further refine the concrete encasement option because the steel reinforcement option presented a major visual intrusion and may be difficult and costly to execute from an engineering standpoint.

MHC looks forward to receiving further information as it develops. As we agreed at the meeting, project engineers will pay close attention to resolving the termination of the concrete encasement so that it does not obscure the arches. The MBTA will also do further investigation to determine the viaduct's original paint color for use in selecting a new scheme when the viaduct is repainted.

These comments are offered to assist in compliance with M.G.L. Chapter 9, Section 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71.00) and Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). Please contact Ann Lattinville of my staff if you have additional questions.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

xc: Charles Sullivan, CHC

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard
100 First Avenue, Building 39
Boston, MA 02129

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

Frederick A. Laskey
Executive Director

January 8, 2009

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MEPA

Mr. Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Attn.: MEPA Office – Anne Canaday
Boston, MA 02114

Subject: Draft Environmental Impact Report #13886
Green Line Extension Project, Cambridge, Somerville and Medford

LATE COMMENT

Dear Secretary Bowles:

The Massachusetts Water Resources Authority (MWRA) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension Project. The Massachusetts Department of Transportation (Mass DOT) is planning to extend the Green Line to improve transit service, mobility and regional access for residents and visitors of Cambridge, Somerville, and Medford.

MWRA's comments focus on issues related to 8 (m) permitting, Non MWRA Wastewater Flows and Discharge Permitting through the Toxic Reduction and Control (TRAC) Group.

8 (m) Permitting

Section 8 (m) of Chapter 372 of the Acts of 1984, MWRA's Enabling Legislation, enables the MWRA to issue permits to build, construct, excavate, or cross within or near an easement or other property interest held by the MWRA, with the goal of protecting Authority-owned infrastructure. MWRA staff has determined that the impacts of the proposed plan (preferred route, stations and maintenance facility alternatives) should have minor or no impact to above ground MWRA wastewater facilities. All three alternative sites for the maintenance facility are remote from MWRA facilities (water or sewer), although one end of the very long and narrow project area for the "Mirror H" alternative comes close to major MWRA underground conduits immediately upstream of the Prison Point CSO Facility. There are no above ground MWRA wastewater facilities near any of the proposed stations along the entire Green Line Extension and Union Square Spur.

S-012-001

However, there is only one location where the proposed Green Line Extension will cross over an MWRA sewer (the Cambridge Branch Sewer at the intersection of Poplar Street and Joy/Chestnut Street in the Brickbottom section of Somerville) and one location where the proposed Union Square Spur will cross over a MWRA sewer (Cambridge Branch Sewer at Medford Street near the Somerville/Cambridge line). An MWRA 8 (m) permit will be needed for these areas if these locations are part of the final plan. The list of required permits on page ES-49 of the DEIR Executive Summary should include MWRA 8(m) permit/s, which will be required for any at grade water and sewer crossings.

S-012-001

MassDOT will coordinate with utilities providers to minimize impacts to existing utility lines. Utilities on bridges identified for reconstruction would be rebuilt with the bridges. An MWRA 8(m) permit will be secured if required.

S-012-002 We encourage the Project Proponent and their consultants to meet with MWRA staff to review design and engineering plans as early as reasonably possible. Staff at DOT should contact Mr. Kevin McKenna within MWRA's Wastewater Permitting Group at (617) 305-5956 for permitting assistance and coordination.

Non-MWRA Wastewater Flows

S-012-003 The component of the project deserving most attention relative to MWRA's wastewater system is the maintenance facility at any of the alternative sites near North Point. While we don't have wastewater infrastructure in the immediate area, careful attention needs to be paid to non-MWRA sewers and storm drains and flows to our facilities. The area suffers from chronic flooding, and we believe the extensive drainage systems cutting through the North Point area to Millers River are in poor shape, at best. Sewer and stormwater plans for the alternative that is finally selected need to be reviewed by MWRA carefully when they become available, in part for any impacts to the dry weather and wet weather flows to the Prison Point CSO Facility.

Discharge Permitting

S-012-004 MWRA prohibits the discharge of groundwater or stormwater to the sanitary sewer system pursuant to 360 CMR 10.023(1) except in a combined sewer area when permitted by MWRA and the municipality. Any plans to discharge construction related groundwater or stormwater to the MWRA sewer system or MWRA CSO system, i.e. Prison Point, will require that the Proponent obtain a discharge permit from MWRA or an NPDES permit from the Environmental Protection Agency. For assistance on this issue, the Proponent and/or Contractor should contact Thomas Coffey, Industrial Coordinator within MWRA's TRAC Group at (617) 305-5624.

S-012-005 If the Proponent intends to install gas/oil separators in its garage structure, they must also comply with 360 C.M.R. 10.016 and with the regulations of the Board of State Examiners of Plumbers and Gas Fitters, 248 C.M.R. 2.00 (State Plumbing Code), and all other applicable laws. The installation of the proposed gas/oil separators will require MWRA approval and may not be back filled until inspected and approved by the MWRA and the Local Plumbing Inspector. Peter Yarossi, MWRA, Regional Manager within the TRAC Group can assist in this permit and can be reached at (617) 305-5671.

Should you have any questions or need additional information on these comments please feel to contact me at (617) 788-1165.

Sincerely,

Marianne Connolly

Marianne Connolly,
Program Manager, Regulatory Compliance

cc: David Kubiak, MWRA, E&C
Kevin McKenna, MWRA Wastewater Permitting
Kattia Thomas, MWRA, TRAC

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2

S-012-002

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

S-012-003

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility. During preliminary engineering, MassDOT will coordinate with MWRA on sewer and stormwater plans for the storage and maintenance facility.

S-012-004

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

S-012-005

Please see response to Comment S-012-004.

Metropolitan Area Planning Council
60 Temple Place, Boston, Massachusetts 02111 617-451-2770 fax 617-482-7185 www.mapc.org
Serving 101 cities and towns in metropolitan Boston

January 8, 2010

Ian A. Bowles, Secretary
Executive Office of Energy & Environmental Affairs
Attention: MEPA Office
Holly Johnson, MEPA # 13886
100 Cambridge Street, Suite 900
Boston, MA 02114



RE: Green Line Extension Project DEIR/EA, MEPA #13886

Dear Secretary Bowles:

The Metropolitan Area Planning Council (MAPC) regularly reviews proposals deemed to have regional impacts. The Council reviews projects for consistency with *MetroFuture*, the regional policy plan for the Boston metropolitan area, MAPC's Smart Growth Principles, and the Commonwealth's Sustainable Development Principles, as well as for their impacts upon the environment. MAPC has reviewed the Draft Environmental Impact Statement (DEIR) and offers the following comments.

L-001-001

MAPC strongly supports expansion of public transit services in the project area and the timely completion of this State Implementation Plan (SIP) commitment. The Green Line project, as proposed, will improve mobility for residents and businesses in the corridor and reduce auto trips and emissions. The project can be even further improved by providing good access for walkers, bicyclists, and transit riders by using the stations to knit the communities together. It can also promote transit-oriented development while preserving affordability. And it can ensure significant benefits accrue to the current Environmental Justice (EJ) communities in this corridor. The DEIR provides a good starting point to address some of these issues, and we commend MassDOT staff and their consultants for their hard work in its preparation.

L-001-002

We do not believe that a final EIR is necessary because of complete analysis and significant agreement on many issues. However, since some additional planning remains to resolve outstanding issues, many of which could affect overall project cost, we believe either a Supplemental DEIR (SDEIR) is necessary to provide the additional information or a new legally binding agreement between the Secretaries of DOT and EEA be established. This agreement should either address, or lay out a process to address all the issues raised in this letter, many of which are likely to be raised in other comment letters to this DEIR. The development of such a SDEIR or agreement should run concurrently with other efforts to move the project forward, and should not delay either an application for federal New Starts funds, or the eventual completion of the project by the 2014 deadline.

Jay Ash, *President* Michelle Ciccolo, *Vice President* Grace S. Shepard, *Treasurer* Marilyn Contreas, *Secretary*
Marc D. Draisen, *Executive Director*

L-001-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

L-001-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

L-001-003 We believe there needs to be a final decision on the maintenance facility location as part of the SDEIR or agreement. MassDOT has proposed the Yard 8 site as its preferred location for the maintenance facility, but community opposition to that location has been very strong, based on quality of life and economic development concerns. In response, MassDOT in December analyzed two additional maintenance facilities, known as Mirror H and Option L. Based on that analysis, plus subsequent public comment, we believe Option L should be designated the preferred alternative. Future MEPA documents should include additional analysis of Option L as proposed—with variations on that design, as well as the adjacent Boston Engine Terminal site—to identify the location and design with the minimum impact on the community and the minimum total cost.

L-001-004 MassDOT has called the Green Line Extension to Route 16/Mystic Valley Parkway terminus (Alternative 2) their preferred alternative, but the proposed project identified in this DEIR (Alternative 1), and the one that will be proposed for the federal New Starts application, will end at College Avenue. The DEIR analysis clearly shows the benefits of extending to Route 16, including 1,700 additional new transit riders per day (4,000 additional total riders at the station, without parking), with their concurrent reductions in greenhouse gases and other pollutants. A Route 16 terminus will also provide much better access for residents of West Medford, Arlington, Winchester, and beyond who will wish to ride the Green Line.

L-001-005 We believe the project benefits have also been understated by the failure of MassDOT to include the Community Path Extension as part of the project, and by their refusal to consider changes to the existing bus network until after the project is open. As shown at Davis Square, the Community Path is one of the primary connections to the surrounding neighborhoods and will likely lead to significant ridership increases. Similarly, since the

L-001-006 project will not encourage auto access, access to the stations from surrounding communities and distant parts of the project communities will have to come via other transit services. Designing the stations with efficient feeder bus service and bus stops at the stations should also significantly increase ridership.

L-001-007 We do not believe, as asserted in the DEIR, that "no substantial neighborhood effects are expected under the proposed alternatives (S-008-012)". Change around new transit stations is well documented and inevitable, but this change need not reduce affordable housing nor have a negative impact on the existing neighborhoods, many of which are located in Environmental Justice communities. We therefore recommend a corridor planning analysis, to identify and plan for these changes.

The Secretary's Certificate required EOT to "develop a more detailed corridor study to examine zoning, development opportunities (including the potential for air rights development to create open space or playing fields or affordable housing), the relationship

L-001-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

L-001-004

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

of EJ communities to the project and potential and existing transit connections". This corridor study was not part of the DEIR.

MassDOT should pursue these corridor plans jointly with the communities to anticipate these changes and to identify strategies that promote positive outcomes. Community fears of change should be dealt with proactively with a plan of action. This corridor planning effort should be part of the SDEIR or agreement.

L-001-008

Fortunately, Somerville has already done much of the necessary planning in Union Square, and is in the process of developing a Comprehensive Plan for the entire community. The East Cambridge Planning Team has completed similar work for the new Lechmere station area. To avoid duplicative efforts, the results of these community-led processes, plus needed future work in Medford as part of the SDEIR or agreement, should be incorporated into all future station location and design work. MAPC has participated in similar work for the South Coast Rail project and in the Route 128 and I-495 corridors and stands ready to provide assistance to MassDOT and the communities.

There are also a number of details missing from the DEIR that should be included in the SDEIR or agreement.

L-001-009

1. Very little detail on the costs of alternatives was provided in the DEIR, just total costs. A full accounting of the costs of different project components, including necessary mitigation, will allow a true comparison of costs versus benefits for each option considered. For the maintenance facility options, mitigation of noise and vibration impacts may make Option L the least costly option, while alternative designs for Option L or the use of the Boston Engine Terminal site could reduce Right of Way costs. The Option L alternative may also allow the MBTA to sell some of the existing property it owns on the Yard 8 and Mirror H sites. The costs for additional sound barriers and traffic mitigation should weigh against the ridership and environmental benefits of extending the Green Line to Route 16. Alternative station designs that have been proposed could also have significant impacts on costs.

L-001-010

2. None of the stations will have new parking, and all of the stations are intended to have good walk, bike, and bus access. Yet none of the station designs include bus pullout areas and all allow for auto drop off and pick up. We believe these priorities are reversed. All stations, with the possible exception of Lowell Street, should have areas where bus passengers can be dropped off and picked up (including waiting areas), and none should have accommodations to encourage people to drive to the stations. All stations accessible from the Community Path should have easy connections built right into their design, and all stations should have at-grade walk

L-001-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

L-001-006

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-001-007

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

L-001-010

connections to the surrounding neighborhoods from multiple locations. And the proposed Brickbottom Station is more appropriately located directly off Washington Street, with direct pedestrian connections to both the Inner Belt and Brickbottom areas of Somerville. These improved station connections should all be proposed and evaluated in the SDEIR or agreement.

L-001-011

3. Perhaps the best way to develop these better station designs would be through station subcommittees, with MassDOT working collaboratively with city and neighborhood representatives to look at multiple options that improve access and reduce costs. These subcommittees would also be where local land use plans, developed in the community-led corridor process described above, are tied directly to appropriate station access plans. The collaborative subcommittee model should also be employed for the maintenance facility, for the Community Path design, and for any other issues where consensus building and technical evaluations are required. Station subcommittees are now being used successfully around the country on other transit extension projects, and what is proposed here is similar to what is currently being done for the South Coast Rail project. The Advisory Committee that met during the DEIR development was helpful for evaluating corridor-wide alternatives, but for the public participation process of the SDEIR or agreement we believe the Secretary should require the more focused subcommittee approach. This approach, however, should not be allowed to delay the overall project scheduled, and, properly done, may actually save time in producing final station designs.

L-001-012

4. Replacement parking (234 spaces) is proposed at Lechmere station. The justification for these spaces in the Green Line Extension project is not included in the DEIR; their necessity is simply assumed. While parking may have been necessary when Lechmere was the northernmost terminus on the Green Line, it is no longer clear what market will be served by this parking. Eliminating this parking will reduce the overall project costs and provide additional surplus land for the MBTA to sell in a prime development area, in addition to reducing auto trips and greenhouse gases. An examination of how many spaces, if any, will be used at Lechmere by Green Line riders should be part of the SDEIR or agreement.

L-001-013

5. Traffic mitigation is proposed at six intersections, but these seem to be a mix between changes required to improve pedestrian access to stations and "mitigation" for traffic increases caused by the project. Intersection improvements needed for good access should be part of the project costs. Station designs that do not encourage drop off and pick up should not result in additional traffic, reducing the need for mitigation. It is particularly unclear why mitigation is proposed at Boston Avenue and Winthrop Street in Medford, a

MassDOT and the MBTA conducted a series of public workshops to gather input on land use and facility design issues from the communities. The workshops were organized around facility locations or groups of locations. All were well-advertised, open to the public and in accessible venues.

L-001-008

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. MassDOT intends to demolish the existing station and prepare the site for future reuse. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement throughout the Project design process.

L-001-009

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. FEIR Chapter 2, Maintenance Facility Alternatives Analysis, provides order-of-magnitude cost estimates for constructing a maintenance facility at the three alternative sites.

L-001-013 location not particularly close to any proposed station where the design (widening by removing 12 parking spaces) is likely to be controversial.

L-001-014 6. No mitigation is proposed near two stations, Route 16/Alewife Brook Parkway and Lechmere, with the worst traffic conditions in the corridor. The Lechmere omission is based on the North Point project taking care of the mitigation. Since the North Point project is currently stalled, and its future mitigation commitments unclear, and since the existing East Cambridge community cannot safely access the relocated Lechmere station without significant upgrades to pedestrian accommodations across and along O'Brien Highway, these upgrades and their costs need to be identified in the SDEIR or agreement and included in the project. If, as recommended, the Route 16 station is the terminus of the project analyzed in the SDEIR or agreement, then safe pedestrian crossing of Route 16 and traffic accommodations to allow efficient feeder bus access to the station should also be included in the document and the project cost.

L-001-015 7. During the development of the DEIR, EOT made a commitment to complete 100% design of the Community Path, without a commitment to pay for construction. There is no mention of this commitment in the Section 61 Findings or anywhere else in the DEIR documents. As mentioned above, we believe that the Community Path should be part of the Green Line Extension project, and costs included in the federal New Starts application. The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop … may be eligible for FTA funding".[1] The Purple Line project in Washington DC and the Expo Line is Los Angeles both have bike paths as part of their rail projects. The commitment to design should be incorporated into the Section 61 Findings, and the design work should continue concurrent with the SDEIR or agreement. If New Starts funding for the path is not received, then MassDOT should immediately apply to the Boston Region MPO for Enhancements or CMAQ funding to insure that funds are in place to build the Path and the rest of the Green Line Extension simultaneously.

L-001-016 8. As part of a more detailed corridor study, MassDOT should coordinate with other planned transportation projects in the corridor, including the Urban Ring and the reconstruction of Route 28/McGrath Highway, which was another requirement for the DEIR. Analysis in the DEIR focused on whether the Green Line project plans would preclude these other projects. We believe the SDEIR or agreement should take the Secretary's "planned in conjunction" phrasing to heart. The Urban Ring, Phase II or Phase III, will share the same general North Point/Brickbottom area,

[1] Federal Register: November 13, 2009 (Volume 74, Number 218), Page 58678-58681.

L-001-010

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-001-011

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

L-001-012

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

L-001-013

Traffic signal timings for pedestrians would require updating to reflect the latest ADA guidance regardless of whether the proposed project were in

and there should be an examination in the SDEIR or agreement of the potential for cost saving/sharing of track, stations, and other project elements. The location and design and cost of the maintenance facility may also be impacted by Urban Ring considerations.

Current Green Line project designs assume the Route 28/McGrath Highway viaduct will remain as is. While there is not yet a project under design, there is widespread support in Somerville for replacing the viaduct with an "urban boulevard". There is also a need for new roadway access to the Inner Belt area. These roadway projects will require several crossings of the Green Line tracks, and design alternatives that make sure these roadway projects are not precluded, and the cost implications of these alternatives, should also be evaluated in the SDEIR or agreement.

9. Finally, the public health implications of ultra-fine particulates (UFPs) have become much better understood since the time of the original EENF filing. There are health risks from emissions from diesel trains, especially for children, older adults, and those with underlying respiratory and cardiovascular problems. A growing body of epidemiologic literature has linked UFPs to asthma and adverse cardiovascular outcomes. Distance from the emission source is directly related to severity of impact. Solutions to these public health problems will require state and federal action, from regulatory relief to electrification of diesel trains. The Green Line itself will not emit significant UFPs, but the project will require some sections of the commuter rail tracks to be moved closer to some residences and perhaps some other at-risk populations. Those that have been moved closer should be identified in the SDEIR or agreement, and appropriate mitigation should be added to the project costs.

L-001-017

We understand that expanding the project definition as we suggested to include a new maintenance facility location, a Route 16 endpoint, and the Community Path Extension will increase the total project cost. But we believe that the benefits in increased ridership, improved air quality and public health will make this expanded project much more likely to win federal New Starts funding, which will save the Commonwealth hundreds of millions of dollars in the long run. In addition, we have heard many public comments on how different station designs could reduce project costs, including designs that would reduce the need for most property takings at the Route 16 station and the Option L site. We believe that a careful examination of the best of these comments may also allow cost reductions, which will further increase the chances of New Starts funding.

We believe that this new project definition, and the enhanced public collaboration process that would go with it, are consistent with Secretary Mullan's new paradigm for an efficient, entrepreneurial MassDOT. The communities of Medford, Somerville, and

place. MassDOT is committed to ensuring timing updates occur prior to service implementation to provide the best possible access to stations by alternate transportation means.

The proposed improvements at Boston Avenue and Winthrop Street are recommended to offset a direct impact of the Project. The existing geometry and projected left-turn traffic at the intersection cause level of service to degrade between the No-Build and Build condition.Through the preliminary engineering process, MassDOT will work closely with the City and local stakeholders to progress design plans at this intersection to reduce parking impacts to the extent possible.

L-001-014

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project.Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

L-001-015

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

L-001-018

Cambridge contain a wealth of ideas and expertise, much of it now focused on getting the best Green Line project possible. We suggest MassDOT collaborate with these communities, testing ideas, revising plans, and refining costs, in a spirit of finding the best solutions. The outcome should be a better project and perhaps even a reduced cost, without delaying the project opening beyond its required completion of December 31, 2014.

Thanks you for the opportunity to comment on this important project.

Sincerely,

Marc D. Draisen
Executive Director

Cc:
Jeffrey B. Mullan, Secretary of Transportation, Commonwealth of Massachusetts
Joseph A. Curtatone, Mayor, City of Somerville
Lauren DiLorenzo, Director of Community Development, City of Medford
Robert Healy, City Manager, City of Cambridge
Monica Lamboy, Executive Director, Strategic Planning & Community Development, City of Somerville
Michael J. McGlynn, Mayor, City of Medford
Susanne Rasmussen, Director of Environmental and Transportation Planning Division, City of Cambridge

L-001-016

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

L-001-017

Mitigation measures for construction period air quality impacts are described in DEIR/EA Sections 5.6, Air Quality, and 6.4, Construction Period Impacts. Air quality is expected to improve during operations, and mitigation measures are not required.

L-001-018

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects. In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



ARLINGTON TRANSPORTATION ADVISORY COMMITTEE
7 Twin Circle Drive, Arlington, MA 02474

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst, EEA #13886
100 Cambridge Street, Suite 900, Boston, MA 02114

RE: Draft Environmental Impact Report, Green Line Extension

Dear Secretary Bowles,

The Arlington Transportation Advisory Committee (TAC) is writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension that is currently under review. We believe the Green Line Extension project can have a significant positive environmental impact on the region that includes Arlington, Medford and Somerville when the terminus is brought to Route 16.

Bringing the Green Line to Route 16 would serve an additional 10,000 residents living within one-half mile of that station. Getting more of these motorists out of their cars to use public transportation will improve our environment in many ways – reduced greenhouse and pollutant emissions, reduced congestion, and better quality of life. Four points are discussed below that would help local residents to choose the Green Line instead of their cars.

L-002-001

1) New pedestrian and cyclist paths are being developed by DCR that could easily connect to a terminus of the Green Line at Route 16. These projects include bike paths being developed in the Alewife and Mystic River reservations. It appears that these investments by DCR have not been factored into the DEIR. To take advantage of these investments and get more people out of their cars, it is necessary to allow easy pedestrian and bicycle access to the station from across Route 16 and Boston Avenue. For potential pedestrians and cyclists living on the other side of Route 16, easy and non-threatening access across Route 16 is essential to gain ridership. The ability to cross the Route 16 intersections Boston Ave and Auburn need to be upgraded, as does the ability to walk/cycle safely under the railroad bridge.

In designing access to the station, care needs to be taken to minimize conflicts between pedestrians, motor vehicles and bicycles in all forms of conflicts. For example, with its current configuration of 4 narrow lanes, few cyclists would choose to use Route 16. Fortunately, DCR is working on improving this with bicycle paths. Also, the station layout itself must be more pedestrian and bicycle friendly than represented on the station layout in the report (fig 3.7-27).

L-002-002

2) The pedestrian and bicycle boardings during the peak hour for Alternate 2b are estimated in the DEIR as 720 pedestrians and 40 bicyclists, extrapolated to 2030 from 2000 census data. This does NOT take into account the added pedestrian and cycling network being constructed by DCR that could make it easier for the some of the thousands of local residents to walk or cycle to the station. We believe the estimates of cyclist and pedestrian boardings at a Route 16 terminus in 2030 may therefore be significantly understated by the DEIR.

L-002-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues. At such a time, connections from anticipated bike paths can be reevaluated.

L-002-002

Ridership projections presented in DEIR/EA Section 3.7 were developed by CTPS and include estimates for various access modes, including walking, biking, bus and car. A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project.

L-002-003

3) The DEIR indicates the taking of office buildings at 200 and 222 Boston Avenue, which house successful businesses contributing to the economy and to the tax base of Medford. This might be avoided by adjusting the Commuter Rail and Green Line tracks slightly to the east. We know there is hesitancy to take residences, but the general layout and traffic circulation at the proposed Route 16 Station does not provide comfortable pedestrian or bicycle access. Adjusting the land taking could enhance the usability of the station, reduce the land taking costs, and retain the property value base for Medford.

L-002-004

4) The pros and cons of allowing rider connections between the Commuter Rail and the MBTA at the Route 16 station were not discussed in the DEIR. The ability to connect to the Commuter Rail at Route 16 would allow Commuter Rail riders better access to the local community including Tufts and commercial locations, increasing potential ridership and rider convenience. This would need easy pedestrian access from the Commuter Rail to the Route 16 station, probably under the existing bridge at Route 16. Its potential benefits should be analyzed. It should be examined.

L-002-005

There are many advantages to performing the project in one phase rather than two. If in two phases, the significant environmental and other benefits of the Route 16 terminus will not be realized for 8 to 10 years, if at all. Separating the phases will add roughly $50 million in 2008 dollars to the cost, and future inflation will increase this value. This estimate may not include the effort to go through the DEIR and other processes a second time. Very importantly, performing the project in one phase will most likely provide the best possible ridership-cost benefit ratios, which are critical in the competition for needed federal funding for the whole project. Finally, with two phases, the local residents will experience a second round of major construction disruptions. ***If at all possible, we urge that the full project be done in a single phase.***

For the above reasons, the TAC suggests that 1) further exploration of the pedestrian and bicycle access to a Route 16 terminus with the impact of the DCR investments and pedestrian and cyclist friendly improvements, 2) a redesigned station layout considering the land taking needed and improved pedestrian accommodation, and 3) the option of rider connections to the Commuter Rail be conducted. This should be done in an expedited but thorough manner before acceptance of the DEIR. We suggest that the focus of this effort should be on the many regional, air quality and financial advantages that can be gained by including the Route 16 Station in the initial phase of the project.

Thank you for the opportunity to comment.

Sincerely

Ed Starr

Edward Starr - Chair
Arlington Transportation Advisory Committee

cc: Arlington Board of Selectmen
cc: Brian Sullivan – Town Manager
cc: Representative Sean Garballey
cc: Senator Ken Donnelly
cc: Steve Woelfel, EOT Green Line Extension Project Engineer
cc: Kate Fichter

L-002-003

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. DEIR/EA Section 5.3 describes the Project's potential acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts when the segment from College Avenue Station to Mystic Valley Parkway/Route 16 is advanced.

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-002-004

As required by the Secretary's Certificate on the EENF, opportunities for a shared station between the Green Line Extension (Medford Branch) and MBTA Commuter Rail were evaluated for the Project. Several candidate locations were evaluated; MVP/16 Station was not one of these. This connection was ultimately dismissed, as described in DEIR/EA Section 3.3, and Appendix B, Section 5. Pedestrian connections to the existing West Medford Commuter Rail Station to a future MVP/16 Green Line Station may be considered in a later phase of

the Project. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain.

L-002-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

CITY OF CAMBRIDGE • EXECUTIVE DEPARTMENT

Robert W. Healy, City Manager *Richard C. Rossi, Deputy City Manager*

RECEIVED JAN 11 2010

January 8, 2010

Secretary Ian Bowles
EOEEA, Attn: MEPA Office Holly Johnson
EEA No. 13886
100 Cambridge Street
Boston, MA 02114

Re: Comments on the Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) for the Green Line Extension Project
EEA No. 13886 Massachusetts Department of Transportation

Dear Secretary Bowles:

The City of Cambridge submits the following comments on the DEIR/EA for the Green Line Extension Project.

The City of Cambridge strongly supports improvements to transit facilities in Cambridge and the entire region to increase transportation options for residents, improve livability and reduce the overall environmental impact of transportation. In order to realize the full benefits of the Green Line Extension project for its residents, the City of Cambridge has submitted two detailed comment letters on the DEIR dated May 13, 2009 and December 16, 2009 which I have attached and should be considered part of the City's full comments on the document.

In considering the full range of the City's comments in the attached letters, I would like to highlight some of the major comment areas which require further design and analysis, and which the City of Cambridge would like to work closely with MassDOT to complete:

L-003-001 **New Lechmere Station Design** – the proposed relocated Lechmere Station is inadequate in terms of station function, comfort, design, and future development potential as envisioned in the North Point special permit. The station and associated infrastructure should be re-designed based on our detailed comments and should be a positive addition to the neighborhood in terms of aesthetics. The station should also function at the highest level in terms of passenger access, comfort and safety.

L-003-002 **Crossing O'Brien Highway** – the moving of Lechmere Station across O'Brien Highway will result in thousands of new pedestrian crossings of the highway each day. Therefore, a detailed design process must take place with the state, city and community to insure that the highway is

L-003-001

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

L-003-002

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

L-003-002

as narrow and easy to cross as possible and that the many new crossings are convenient, safe and provide a high level of service for pedestrians.

L-003-003

Maintenance Facility - the proposed Mirror H site has significant impacts on the development project permitted at North Point, including affecting approximately three acres of land and 1,557,000 square feet of development. In addition to adversely affecting this regionally important transit oriented development project, this would impact the City's ability to expand the local property tax base and create jobs. As also pointed out by East Cambridge residents at the public meeting held on December 16, 2009, a maintenance facility in this location would only add to the noise experienced by existing and future residents from the Boston Engine Terminal.

L-003-004

Old Lechmere Station - the redevelopment of the old Lechmere station site is of significant interest to the City and East Cambridge neighbors. There is a great deal of interest in exploring the possible redevelopment of the site to include a year-round public market. We urge MassDOT to begin discussion of future uses of this site early on with the City and neighbors.

The City appreciates this opportunity to comment on this important project. The proposed Green Line Extension will have significant regional travel benefits and could be a positive addition to East Cambridge provided careful attention is paid to the details of the project in this neighborhood. If there are any questions on these comments, please contact Susanne Rasmussen, Director of Environmental and Transportation Planning, at 617-349-4607 or srasmussen@cambridgema.gov.

Very truly yours,

Robert W. Healy
City Manager

cc: Kate Fichter, MassDOT Project Manager

L-003-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-003-004

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment.

Johnson, Holly (EEA)

From: Craig Kelley [craig@craigkelley.org]
Sent: Tuesday, January 05, 2010 11:39 PM
To: Johnson, Holly S (ENV)
Cc: 'Barbara Broussard'; Wig; Michael R. Hegarty; 'Alan Greene'; Shannon Larkin East Cam; joeavin@comcast.net; chris@chris-matthews.com; 'Mark Jaquith'; 'Mark Jaquith & Heather Hoffman'; kmolloy@gmail.com
Subject: Cambridge City Councilor Craig Kelley's Comments on the Green Line Extension DEIR EEA #13886

Dear Ms. Johnson:

Please forward my comments on the Green Line Extension DEIR to the appropriate party. Many thanks.

Craig Kelley
Cambridge City Council

As a City Councilor in Cambridge, I, like most people I know, support the Green Line extension. However, there are some shortcomings in the current documentation that should be addressed before the planning is considered final. Addressing these shortcomings includes:

L-004-001 *Stations, including Lechmere, need to be focused on integrating the surrounding community and facilitate bike, bus and pedestrian access, not access or parking for cars.

L-004-002 *Protecting existing housing communities by eliminating the Yard 8 Option for the Maintenance Facility and requiring a full analysis of Scheme L and the alternate Scheme L designs.

L-004-003 * Committing to a collaborative public process for the next phase that would provide oversight and station area participation and develop a process for addressing mitigation concerns.

L-004-004 * Integrating the Community Path into the design, planning and funding of the Green Line extension.

L-004-005 * Coordinating the Green Line extension with calming of the McGrath/O'Brien Highway in Cambridge & Somerville.

L-004-006 * Designing and constructing the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project.

As I said at the public testimony several weeks ago, and as Somerville Mayor Curatone stated more eloquently than I, we have one opportunity to extend the Green Line. Mistakes made in this planning process will come back to haunt us during construction and operations in future years, so it is imperative that we get it right at this time.

Please feel free to contact me should you have any questions or concerns about my comments.

Sincerely,

Craig A. Kelley
Cambridge City Council
6 St. Gerard Terrace
Cambridge, MA 02140
617-354-8353

1

L-004-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-004-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-004-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

L-004-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

L-004-005

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

L-004-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input

on station design and layout, neighborhood impacts, economic development, and other area planning issues.

CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

BETH RUBENSTEIN
Assistant City Manager for Community Development

SUSAN M. GLAZER
Deputy Director for Community Development

Cambridge Comment Letter

Green Line Maintenance Facility/December 16, 2009

Thank you for this opportunity to comment on the Draft EIR for the Green Line Extension project. The City of Cambridge is very supportive of the MBTA's plans to extend Green Line service into Somerville and Medford, expanding the system's reach into these important population centers. A new station in the North Point area of Cambridge will also support the planned development of a mixed-use community in this emerging area, as well as the over 750 units of housing that have been built in North Point in the last several years.

We have a number of questions and comments about information contained in the DEIR and I will touch on these issues briefly:

L-005-001

1. **Station Design** – at this point the design of the new Lechmere Station is strictly functional and bare bones. We urge the MBTA to devote additional time and energy to refining that design so that the resulting station makes a positive aesthetic contribution to the East Cambridge and North Point neighborhoods and functions at the highest levels in terms of passenger access, comfort and safety.

L-005-002

2. **Crossing of O'Brien** – we urge the MBTA to continue to pay close attention to the details surrounding the pedestrian crossing of O'Brien Highway. The moving of the station across the highway will result in significant increases in the number of pedestrians crossing this busy thoroughfare; it is of the greatest importance that those crossings be well-planned and timed to maximize safety and pedestrian ease of use.

L-005-003

3. **Maintenance Facility**. As you point out in the Maintenance Facility Alternatives Analysis, one of the locations under consideration for the Green Line Maintenance Facility, Mirror H, would have significant impacts on the 5 million square foot mixed-use project permitted for North Point. Six parcels of that project--A, B, C, D, E and F--would be significantly affected by location of the maintenance facility and associated rail lines at Mirror H. Approximately one-half to one-third of the area of these parcels would be taken up by the facility and tracks, depriving the owner of use of that land. These parcels comprise approximately 3 acres of land area and 1,557,000 square feet of potential development. It is not clear where the figure of $8 million to acquire the privately-owned parcels comes from, but in our view that number could go much higher.

344 Broadway
Cambridge, MA 02139
Voice: 617 349-4600
Fax: 617 349-4669
TTY: 617 349-4621

L-005-001

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

L-005-002

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

L-005-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-005-004

4. **Noise Impacts**. In the public discussions surrounding the permitting of the North Point project in 2003, above-ground parking structures were planned for the parcels to the north of the site; these structures were intended to act as a noise and vibration buffer from the activity in the existing rail yards. The introduction of a Green Line maintenance facility would remove that buffer and add an additional source of noise and vibration to the development site and the East Cambridge neighborhood. The DEIR should include a detailed assessment of the noise impacts of the maintenance facility on existing residents of North Point and the adjacent East Cambridge neighborhood.

L-005-005

5. **Mix of Uses.** The Cambridge Zoning Ordinance for North Point (Section 13.73) requires that there be a balance of commercial and residential uses, with commercial uses comprising no more than 35% of uses. By reducing the amount of residential development by up to one-half, the amount of commercial development would also need to be reduced in order to maintain the 65/35 mix of residential/commercial.

L-005-006

6. **Jobs and Taxes**. The City of Cambridge and the Commonwealth of Massachusetts have long regarded the North Point project as a key transit-oriented development opportunity in Eastern Massachusetts. The fully permitted project is an important aspect of the City's ability to expand the local property tax base and create jobs. This potential would be severely compromised by locating the maintenance facility at Mirror H.

L-005-007

7. **Old Lechmere Station.** Finally, we urge MassDOT to work closely with the City of Cambridge and the East Cambridge neighbors on planning for use of the old Lechmere Station site, which will be vacant once the new station has been built. There is a great deal of interest in exploring whether a year-round public market could be located in this area. We find these ideas intriguing and applaud the neighbors' enthusiasm and initiative. We urge discussion of future uses of this site to begin early.

Thank you for this opportunity to comment on this important regional transportation initiative.

Very truly yours,

Beth Rubenstein

Beth Rubenstein

Assistant City Manager for Community Development

L-005-004

Pursuant to FTA-established guidelines, noise and vibration impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. Details on noise and vibration measurements for the Option L maintenance facility site and mitigation measures are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis, and Chapter 8, Draft Section 61 Findings and Mitigation Commitments, respectively.

L-005-005

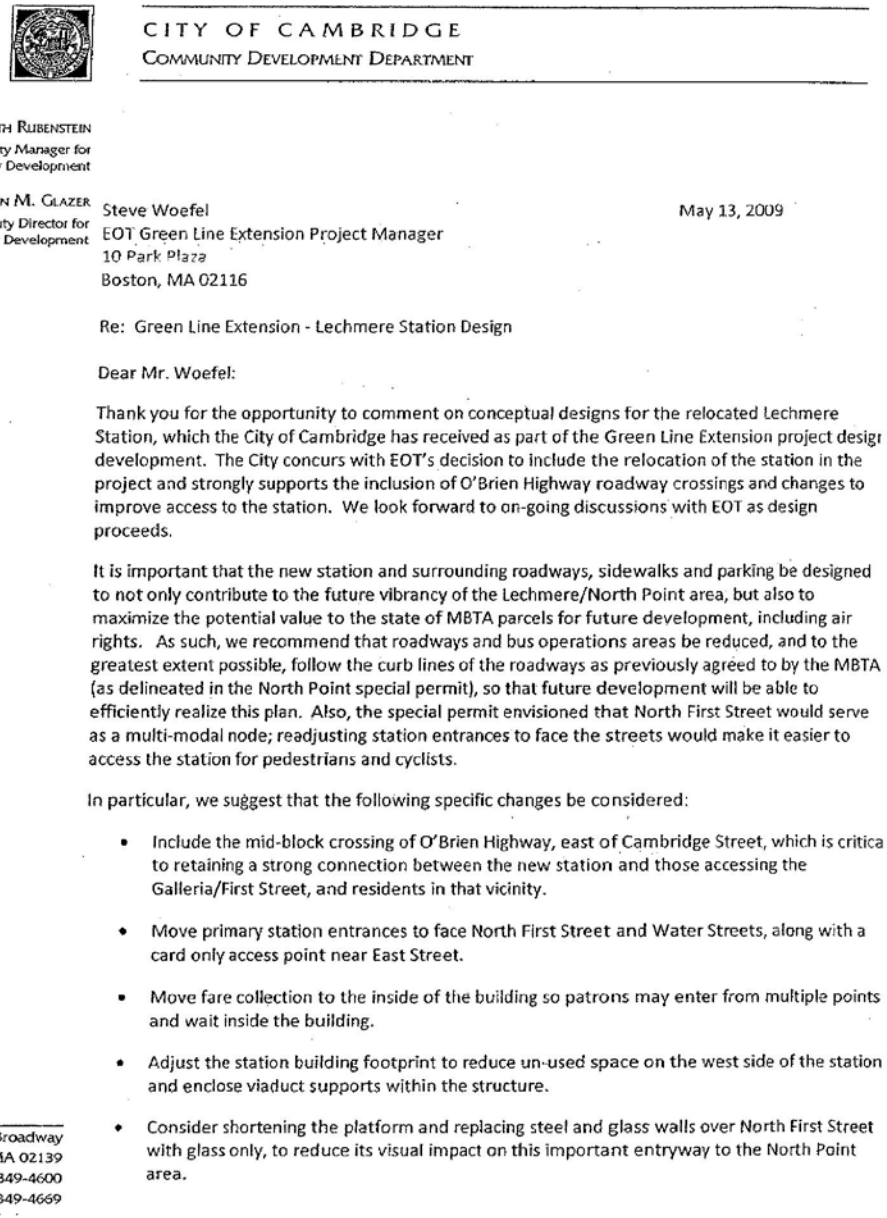
MassDOT has and will continue to coordinate with municipalities such as the City of Cambridge at appropriate milestones as the Project progresses. These will help ensure compliance with legal requirements, including zoning ordinances. The Proposed Project has been designed to retain the ability to construct NorthPoint as permitted.

L-005-006

An expanded technical and environmental analysis, including socioeconomic impacts, of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-005-007

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment.



CITY OF CAMBRIDGE
COMMUNITY DEVELOPMENT DEPARTMENT

BETH RUBENSTEIN
Assistant City Manager for Community Development

SUSAN M. GLAZER
Deputy Director for Community Development

Steve Woefel
EOT Green Line Extension Project Manager
10 Park Plaza
Boston, MA 02116

May 13, 2009

Re: Green Line Extension - Lechmere Station Design

Dear Mr. Woefel:

Thank you for the opportunity to comment on conceptual designs for the relocated Lechmere Station, which the City of Cambridge has received as part of the Green Line Extension project design development. The City concurs with EOT's decision to include the relocation of the station in the project and strongly supports the inclusion of O'Brien Highway roadway crossings and changes to improve access to the station. We look forward to on-going discussions with EOT as design proceeds.

It is important that the new station and surrounding roadways, sidewalks and parking be designed to not only contribute to the future vibrancy of the Lechmere/North Point area, but also to maximize the potential value to the state of MBTA parcels for future development, including air rights. As such, we recommend that roadways and bus operations areas be reduced, and to the greatest extent possible, follow the curb lines of the roadways as previously agreed to by the MBTA (as delineated in the North Point special permit), so that future development will be able to efficiently realize this plan. Also, the special permit envisioned that North First Street would serve as a multi-modal node; readjusting station entrances to face the streets would make it easier to access the station for pedestrians and cyclists.

In particular, we suggest that the following specific changes be considered:

L-005-008

- Include the mid-block crossing of O'Brien Highway, east of Cambridge Street, which is critica to retaining a strong connection between the new station and those accessing the Galleria/First Street, and residents in that vicinity.

L-005-009

- Move primary station entrances to face North First Street and Water Streets, along with a card only access point near East Street.
- Move fare collection to the inside of the building so patrons may enter from multiple points and wait inside the building.
- Adjust the station building footprint to reduce un-used space on the west side of the station and enclose viaduct supports within the structure.
- Consider shortening the platform and replacing steel and glass walls over North First Street with glass only, to reduce its visual impact on this important entryway to the North Point area.

344 Broadway
Cambridge, MA 02139
Voice: 617 349-4600
Fax: 617 349-4669

L-005-008

The planned midblock pedestrian crossing of O'Brien Highway between East Street and Land Boulevard/Charlestown Avenue is not being proposed as mitigation for the Green Line Extension project. The installation of this crossing is dependent upon the location's ability to demonstrate need by meeting pedestrian signal traffic warrants as established by the Manual on Uniform Traffic Control Devices (MUTCD). Pedestrian projections for the area indicate that both the relocation of Lechmere Station and the full-build development of NorthPoint must occur before a pedestrian traffic signal would be warranted. Since the completion of NorthPoint is unknown at this time, pedestrian traffic related to the development could not be included in the warrant analysis and the warrant would not be met. Traffic signal conduit will extend to the end of the project limits for the reconstruction of O'Brien Highway, to be tied into by the NorthPoint proponent when they fulfill the remaining mitigation measures associated with O'Brien Highway. This will make the process of installing the midblock crossing simpler and less costly for the proponent in the future.

L-005-009

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

L-005-009

- The station design should allow light into the building and create a positive and elegant fac to the entrance to North Point, as well as to future buildings on adjacent parcels. Clear glazing should be utilized particularly on platforms and passenger waiting areas to improve safety, visibility, passenger orientation, and to animate the street.
- Lighting should be designed to create safe spaces and passageways without creating light spillover that would disturb neighbors.
- Merge the eastern half of the bus-way with the two-way extension of North Point Bouleva (11 max. travel lanes) to simplify movements to N. First Street and make it easier to construct future roadway connections to match the special permit plan. With station entrances facing N. First and Water streets, a separate bus-way alongside the building is n needed.
- Maintain curblines as approved in the special permit as closely as possible on the north sic of N. First Street and create a tighter corner radius where N. Point Boulevard enters it. A pull-off area, similar to the original design, should be included so vehicles that pull over to the curb at the station do not block bicycle lanes.
- Provide a bicycle connection from the Community Path to the new station and to a covere secure bicycle parking facility, similar to those at Alewife Station.

L-005-010

- The parking lots should have additional landscaping, trees, shrubs so that rows of parking have no more than fifteen contiguous parking spaces without a densely planted landscape buffer. Keep pedestrian crossings of streets as short and direct as possible from parking lo and existing development to the station.
- In addition to existing development, the station directly impacts three proposed adjacent developments: the 5 million sq. ft. North Point PUD, 22 Water Street, and the Archstone housing project. In order to understand the impact of the new Lechmere Station design c its abutters and the broader area, it is important that the architect build a three dimensio model – perhaps one that could be built to fit into one of the North Point Development models developed by Guilford/JLL.

L-005-011

- Continue a public process with residents and the City regarding the station design and changes to O'Brien Highway as further plans are developed.

Thank you for the opportunity to comment on this important project. We look forward to closely working with EOT as the design moves forward to produce a station design and roadway system t meet the needs of current and future Cambridge residents, add to the urban fabric of North Poin maximize potential value of MBTA land, and function effectively as an intermodal transportation hub.

Sincerely,

Beth Rubenstein

Beth Rubenstein

Assistant City Manager for Community Development

Cc: Kate Fichter, EOT

L-005-010

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

L-005-011

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

City of Medford

Office of The Mayor
Rooms 202-204, City Hall
Medford, Massachusetts 02155
Telephone (781) 393-2408

MICHAEL J. MCGLYNN
MAYOR

FAX (781) 393-251
TDD (781) 393-251

RECEI
JAN 5 20
EEA

January 6, 2010

Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
Ms. Holly Johnson, EEA No. 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Subject: Green Line Extension Project
Cambridge/Somerville/Medford
Draft Environmental Impact Report (DEIR)

Dear Secretary Bowles:

Please accept this comment letter on the DEIR prepared for the Green Line Extension Project. The City of Medford has led by example in its support of public transportation and transit oriented development as evidenced by the redevelopment of both the Station's Landing and River's Edge projects adjacent to the Wellington Station Orange line. However, due to the lack of detailed technical analyses, the inability of the State's Project Director to deliver promises made during this planning process and the insufficiency of mitigation to ameliorate anticipated negative impacts on both residential and commercial properties and therefore the citizens of the City itself, I am prevented from fully embracing the project as proposed at this time.

Be assured that as Mayor I support the expansion of public transit service in Medford with the goal of improving air quality and creating transit oriented development. The Green Line Extension originally proposed to the Medford Hillside has the potential of providing benefits in addition to improvement in air quality.

When the Romney Administration proposed substituting other projects for the Green Line, I argued for the project to move ahead and proposed that the project terminus be studied in a DEIR to Mystic Valley Parkway. Not only would this location provide for additional riders, I believe the extension beyond College Avenue could provide additional air quality benefits while providing potential for transit oriented development. My only condition for the final support of this terminus was that the State provide adequate technical information to review the proposal while minimizing property takings and impacts. Unfortunately, despite the information contained in the DEIR, the State has failed to provide the necessary information to make an informed decision on whether it is best to extend the project beyond College Avenue and in what manner. A decision of this magnitude cannot be made by conjecture. Therefore, I urge the State to meet its responsibility to provide the necessary information and to work in partnership with the City so we may resolve these issues and move forward together.

L-006-001

The Mass/DOT's (Proponent's) approach to build the project in two phases with College Avenue functioning as a terminus but not being designed as one, presents difficulties. The uncertainty over how long the proposed College Avenue station will function as an end of the line Green Line station is a major concern for the City of Medford. The lack of information on station design in general is not sufficient. The FEIR should provide alternative designs for the College Avenue station including one that moves the station platform to the south of the bridge. Pedestrian access could still be provided from the north with mechanical and pathways incorporated into the bridge design. Reduction of platform length in addition to a shift in the southerly direction should provide some measure of relief to residents of Burget, Hume and Sunset Avenues as compared to the proposed location.

L-006-002

While I am not in support of the creation of all day parking for people from the greater Boston region, I am concerned about the ability of the stations to accommodate drop off and pick up, and to provide safe and efficient access by pedestrians and people with mobility or other physical limitations, bicyclists and people arriving by bus. If assumptions regarding how people arrive at stations are inaccurate, the functioning of the already constricted Boston and College Avenue intersection could prove debilitating in terms of traffic operations, safety and parking impact on adjacent neighborhoods. The FEIR must justify the DEIR's assumptions regarding drop off and pick up rates.

L-006-003

L-006-004

L-006-001

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. These will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

L-006-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

L-006-003

The only Green Line Extension station that will provide parking is Lechmere Station. Drop-off and pick-up areas will be provided at at several stations. These will accommodate expected kiss-and-ride activity. DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and new Lechmere Station, respectively. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering.

L-006-004

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for parking or passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent

L-006-005 Pedestrian as well as vehicular mitigation improvements must be considered. The study identifies unregulated parking opportunities near the proposed stations. Use of spaces may be abused by transit riders adversely affecting neighborhoods. A parking management plan should be prepared by Mass/ DOT in cooperation with the City and submitted as part of the FEIR to ensure neighborhoods are not impacted as a result of demand for parking.

L-006-006 It is unclear as to how much construction will occur at night. The FEIR needs to state clearly what the Proponent's intended schedule of construction is providing a breakdown of am versus pm hours. Specifics on when, where, and for how long nighttime and/or weekend construction will occur should be presented. Based on that presentation, mitigation must be proposed. Also regarding construction, a noise analysis during construction based on typical equipment to be utilized should be presented in the FEIR. The DEIR does not sufficiently analyze impacts and mitigation within Medford.

L-006-007 In regard to stormwater, an operation and maintenance program using best management practices must be established. Additionally, proper
L-006-008 infrastructure must be required to avert flooding. More information is required on utilities and proposed mitigation.

L-006-009 The FEIR must examine the extension from College Avenue to Mystic Valley Parkway to the same degree as is required in the Secretary's Certificate for all portions of the project. The DEIR quite simply does not. This fact, along with the disconnect between what the Proponent's representatives say publicly versus what has been presented and committed to in this report has created the fundamental dilemma of how to provide unwavering support for this project while ensuring that the best interest of the citizens is served.

In general, the DEIR does not adequately address all impact issues for the extension beyond College Avenue. The Proponent has presented this extension as both its preferred alternative and its "worst case scenario". The City's primary issue with the extension beyond College Avenue has been with the Proponent presenting a plan that minimizes noise, vibration, air quality, parking and the taking of private property including successful commercial properties that generate tax revenues and employment. The Proponent's representatives have stated that such a plan exists but have not shown it.

practical. Section 4.4 of the FEIR describes access and circulation at College Avenue Station in more detail.

L-006-005

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

L-006-006

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources.

L-006-007

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

L-006-008

MassDOT will coordinate with utilities providers to minimize impacts to existing utility lines. Utilities on bridges identified for reconstruction would be rebuilt with the bridges. The existing MBTA drainage system will be

They stated they would complete the necessary field survey to identify actual land acquisitions that can be shown publicly in a format that is understandable by all. That survey has not been done resulting in schematics that look good on paper but have little usefulness in reality and do not allow the public to determine if and how much of their property will be affected. The Proponent has also failed to complete its required land use study as it has promised and as is required in the Secretary's Certificate. This study along with the identification of station locations will provide the basis from which the City will conduct more detailed land use planning. This information has been requested by the City repeatedly but it has not been forthcoming.

L-006-010

Key department heads within the City shall submit comments under separate cover. Additionally, the City's consultant has provided comments on the topics of air quality, noise and vibration, constructability, wastewater, transportation, stormwater and visual impacts. This technical review is attached.

L-006-011

It has been the vision of this administration to support the preservation of residential neighborhoods in the Hillside while identifying opportunities for the expansion of our commercial tax base and the creation of jobs. The Walkling Court housing development could benefit from a public/private partnership to improve living conditions for our seniors while providing a mix of uses. Similarly, the redevelopment of the Whole Foods' property should be evaluated to explore mixed use transit oriented opportunities.

If the Proponent would fulfill both its commitment to work with us, and its obligation to provide adequate and transparent information, the construction of this project from Lechmere Station to Mystic Valley Parkway could be achieved in a way that not only improves public transit but improves the quality of life in our neighborhoods.

While the extension of the Green Line through Medford may well bring with it many benefits, the DEIR does not provide me with sufficient information on issues critical to the quality of life of Medford resident to support the project without reservation at this time. I appreciate your consideration of these comments and look forward to the FEIR addressing the issues raised.

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reconstructed with proposed connections to the existing municipal drainage system.

L-006-009

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-006-010

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how a series of workshops will be scheduled to gather public input on land use and facility design issues.

MassDOT's responses to the City's Consultant FST's general comments

Very truly yours,

Michael J. McGlynn
Mayor

Attachment

cc: Medford City Council
Congressman Edward Markey
Senator Patricia Jehlen
Representative Paul Donato
Representative Sean Garballey
Representative Carl M. Sciortino, Jr.
Mayor Joseph A. Curtatone, City of Somerville
Mary Beth Mello, Deputy Regional Administrator, FTA
NEPA Reviewer, USDOT
Marc Draisen, Executive Director, MAPC
Barbara Rubel, Community Relations Director, Tufts University
Monica Lamboy, Director, Office of Strategic Planning and Comm. Development
Rita Donnelly, Representative Green Line Advisory Committee
Ken Krause, Representative Green Line Advisory Committee
Dr. William Wood, Representative Green Line Advisory Committee
Noah Chesnin, Conservation Law Foundation

5

and issue-specific comments are provided as responses L-006-012 through L-006-019. Responses to detailed comments on air quality, noise and vibration are provided in Responses L-010-020 through L-010-029. The Consultant's detailed comments on traffic, stormwater, wastewater, bridges, constructability and visual impacts will be addressed through the preliminary engineering process. MassDOT looks forward to continuing to work with the Cities of Medford, Somerville, and Cambridge through the subsequent design and construction phases of the Green Line Extension Project.

L-006-011

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA. Analysis of the segment from College Avenue to Mystic Valley Parkway/Route 16 will be conducted when that phase is advanced and subject to separate review under MEPA. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

City of Medford

OFFICE OF COMMUNITY DEVELOPMENT

City Hall - Room 308
85 George P. Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2480
FAX: (781) 393-2342
TDD: (781) 393-2516

LAUREN DILORENZO
Director

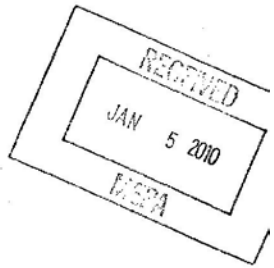
To: Holly Johnson, MEPA Analyst
From: Lauren DiLorenzo, Director
Date: January 5, 2010
RE: EEA #13886

Enclosed are two (2) copies of the Mayor's comment letter and the referenced consultant's report prepared by Fay, Spofford & Thorndike. I am also sending you my letter. Would you be able to substitute the one I sent earlier. There was a typo but no substantial change. Thank you.

Lauren DiLorenzo
Director

LD:pw

Enclosures



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MEMORANDUM

TO: Mayor Michael J. McGlynn
City of Medford

FROM: Ed Hollingshead, AICP

DATE: December 11, 2009

SUBJECT: Peer Review Green Line Extension Project
EA/DEIR and 4 (f) Statement EEA # 13886

This memorandum was prepared to summarize the findings of our peer review of the Medford section of the referenced EA/DEIR (Document). Attached to this memorandum are individual memoranda containing our completed reviews for the air quality, noise/vibration, visual, traffic, stormwater, and constructability sections of the Document. Outlined below is an overview of the project and our main comments.

Overview

The project's Preferred Alternative involves the extension of the Green Line from Lechmere Square in Cambridge to Route 16 in Somerville. Three stations are proposed in or immediately adjacent to Medford: Ball Square, College Avenue Station, and Route 16.

Due to funding constraints discussed in the Document, the Preferred Alternative is divided into two parts. The first part termed the Proposed Project (Alternative 1) proposes to extend the Green Line from Lechmere to the proposed College Avenue Station at College Avenue in Medford by 2014. The project's second part termed the "Future Full-Build Alternative or the Preferred Project" (Alternative 2), which completes the extension beyond College Station to Route 16 at Medford Hillside, is anticipated to receive funding between 2016 and 2020. Consequently, while the intent is to follow the Proposed Project with the final extension to Route 16 with a minimum of lag time the Future Full-Build Alternative, which can be thought of as beyond College Station, is a later and, realistically, less-certain phase.

In general, the Document is well done and complies to an acceptable degree with the December 1, 2006 Certificate of the Secretary of Environmental Affairs on the October 10, 2006 Expanded Environmental Notification Form.

Having said that, while the directions in the Certificate are followed and required topics are covered, our review as identified issues that need to be responded to in the Final Environmental Impact Report (FEIR).

Our review focuses on the following main topic areas:

FAY, SPOFFORD & THORNDIKE

- Transportation
- Stormwater
- Wastewater
- Bridges
- Constructability
- Air Quality
- Noise and Vibration
- Visual Impacts

Issues related to our overall findings follow.

General Comments

L-006-012

1. The language used in the Project Description on Pages ES-11 and ES-12 of the Executive Summary is misleading for the Medford segment of the project. This portion of the project is rarely in a full cut section. Therefore, impacts to adjacent properties along the existing Lowell Commuter Rail corridor need to be mitigated in a different manner other than using "green" retaining walls. The only portion in a full cut section is located in the vicinity of the Winthrop Street Bridge. This is the only bridge in Medford where the rail profile is lowered to achieve the necessary vertical clearance. All other segments of the Green Line Extension through the City of Medford are located in a partial cut, at grade, or on retained fill. Widening the rail footprint in these areas will have greater impact to adjacent properties and require other means of mitigation besides the use of "green" retaining walls. What other types of mitigation are being proposed in the City of Medford?

L-006-013

2. In regard to construction staging, the Construction section on Page ES-14 states "Most of the right-of-way is located below the surrounding land surface, reducing potential land acquisitions as well as environmental impacts such as noise and visual changes." This statement is not entirely correct for the Green Line Extension through the City of Medford. Only a limited segment of the project in the vicinity of the Winthrop Street Bridge exhibits an existing cross section as shown in Figure ES-3 (i.e., cut slopes on both sides of the rail corridor). In fact, no portion of the Proposed Project has an existing cross section similar to Figure ES-3. This cross section only applies to the "Future Full Build" Alternative that extends to the Mystic Valley Parkway (Route 16) Station. The Proponent should, in sketch form, similar to Figure ES-3, provide the range of existing cross sections throughout the various segments of the Proposed Project within the City of Medford and include the mitigation treatments for each section.

Based on the construction staging discussion on Page ES-14, it is unclear how only two bridges will require traffic detours during construction. In the preceding sections it states that all four bridges in the City of Medford (Harvard Street, College Avenue, Winthrop Street, and North Street) need to be reconstructed. The Proponent should provide additional details to support the statement that most bridges will not require detours. For all bridges that do require traffic detours, these routes within the City of Medford and detour routes into Medford from replacement of the Broadway Street Bridge in Somerville should be shown.

L-006-014

3. Proponent should provide an emergency response plan showing access and egress locations to the railroad right-of-way to assist emergency personnel when responding to an incident/emergency on a Green Line or Commuter Rail vehicle. This is of particular concern in sections bordered by noise barriers. Who will be the primary respondent to such an incident--City of Medford responders or others?

L-006-015

4. Table 6-2 on page 6-3 states that the project will avoid nighttime construction in residential neighborhoods. As much of the Commuter Rail alignment abuts residential neighborhoods, the proponent

L-006-012

As stated in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures, soundwalls are proposed for some locations where the Green Line Extension corridor is level with surrounding properties. The mitigation measures required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

L-006-013

Detailed construction staging and traffic management plans will be developed in more detail during the preliminary engineering phase of the Project. These plans will be developed in close coordination with MassDOT, the MBTA, the City of Medford, the City of Somerville, and the City of Cambridge.

L-006-014

During preliminary engineering, MassDOT will coordinate with emergency response providers to plan for appropriate site, vehicle, and community access while the Project is constructed and operating. A detailed SSMP will be developed during preliminary engineering in coordination with the city to identify temporary and permanent emergency access and egress routes.

L-006-015

MassDOT is confident that construction of the Green Line Extension can be accomplished with a minimum of disruption to the commuter rail service, and will direct contractors to minimize construction activities during night time. MassDOT has met with the MBTA on several occasions to discuss construction staging within this rail corridor. The MBTA and MBCR will be performing this work as they did for the Orange Line in the Northeast corridor. Proposed track construction and track

L-006-015

should specify how and where specifically construction activity could occur during revenue hours. All locations of nighttime or weekend construction should be identified and hours of construction identified. Page ES-14 in the document states, "The preliminary analysis of construction staging and sequencing shows that it is feasible to construct the Project while maintaining railroad operations, access to abutters, and traffic and pedestrian paths." Based on the conceptual level of analysis that has been performed up to this point, we believe this statement is misleading. It seems to imply that the current "quality of life" within the City of Medford will go on unaffected by the construction of this project. We do not understand how Commuter Rail operations will be maintained at current levels of service throughout construction. The preliminary staging plans in the EA/DEIR show only one phase of construction occurring during non-revenue hours of operation. Given the proximity of the construction to the existing Commuter Rail tracks, we find it impractical to maintain Commuter Rail service without employing the use of full time flag persons, nighttime construction, or weekend construction activities to minimize disruption to Commuter Rail schedules. All of these methods will affect daily schedules, commuter routes, and pedestrian travel. The Proponent should identify, in more detail, what methods will be used to maintain current service levels.

L-006-016

5. On page ES-38 considerable discussion is devoted to the anticipated noise impacts of the project and the range of potential mitigation measures such as noise walls, noise treatments, and rail lubrication. Please identify specific locations in the City of Medford that qualify for noise treatments and noise walls. The FEIR should indicate areas where mitigation for noise and vibration is needed based on the impact assessment and identify the specific mitigation that will be proposed (e.g., use of ballast along the tracks, sound insulation, sound barriers, maintenance plans).

The EA/DEIR provides the first step in detailing impacts and mitigation. The FEIR should identify specific locations within the City of Medford that require noise or vibration mitigation and provide the specific mitigation being proposed for each location. As feasible, mitigation for noise impacts (particularly window replacements which are unrelated to physical construction in the corridor that might influence construction of some barriers) should be provided prior to the start of construction rather than at the completion of construction as stated in Table 6-1 on page 6-2.

L-006-017

6. On Page 5-116 regarding specific noise mitigation treatment it states, "For many locations along the MBTA Fitchburg and Lowell lines, noise barriers are a feasible and effective means of noise mitigation because the existing right-of-way is lower than sensitive receptors for substantial portions of the Project." While this may be true for segments of the project outside the City of Medford, this is certainly not the case for the Green Line Extension project within the city limits. As identified and stated earlier, much of the corridor within the City of Medford is either in partial cut (i.e., west side in cut/east side at grade), entirely at grade, or entirely on retained fill sections. As a result, the use of sound/noise walls as an effective mitigation measure becomes questionable and, in some cases, impractical. Second-story bedroom windows of residential receptors, for instance, would seem to be extremely difficult to mitigate. Table 5.7-4 on Page 5-117 and Figure 5.7-5 indicate the maximum height noise barrier being proposed in the vicinity of Piggott Road, Lyman Avenue/Charnwood Street is 10 feet. Adjacent to Burget Avenue the proposed noise wall height is only 6 feet. Sensitive receptors in this vicinity are at approximately the same elevation as the rail corridor. Thus, the second stories of these receptors are higher than the noise walls being proposed. Please provide your proposed noise mitigation treatments for this type of situation as it relates to the sensitive receptors along Boston Avenue, Winchester Street, Colby Street, Burget Avenue, Charnwood Road, Orchard Street, Lyman Street, Walkling Court, and Piggott Road.

L-006-018

7. On Page 5-127, Table 5.8-4 Potential Vibration Impacts at Sensitive Receptors Without Mitigation appears not to include many sensitive receptors in its vibration analysis. In the EA/DEIR there is no mention of vibration studies being conducted or vibration monitoring sites being established north of College Avenue Station. In fact, based on Figure 4.8-3 Noise and Vibration Measurement Sites, only two

shifts will be done on weekends using a work train while maintaining bidirectional commuter rail service on track 2.

L-006-016

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

L-006-017

The location, length and height of noise barriers proposed for the project are specified in Section 5.7.3 of the DEIR/EA. Mitigation recommendations for noise impacts will be further refined during Project design. FTA guidelines specify that potential noise impact is assessed and mitigation is provided, when necessary, feasible and reasonable, for outdoor locations of frequent human use.

L-006-018

DEIR/EA Sections 5.7, Noise, and 5.8, Vibration, describe the noise and vibration impacts, respectively, expected from the Project. Pursuant to FTA-established guidelines, these impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments, describes the mitigation measures that would be implemented to eliminate, minimize, or offset impacts above regulatory thresholds.

L-006-018

vibration monitoring sites were established at sensitive receptors along Boston Avenue between College Avenue and Harvard Street near Tufts University buildings. To accommodate the new Green Line tracks, the existing Commuter Rail tracks are being moved as much as 18 feet further east within the existing right-of-way. Consequently, there is the potential for increased vibration to sensitive receptors located along that side of the right-of-way. While Table 5.8-4 does identify potential vibration impacts at sensitive receptors along Winchester Street, Colby Street, Brookings Street, and Piggott Road, it fails to mention any potential vibration impacts to residential sensitive receptors along Burget Avenue, Charnwood Road, Orchard Street/Lyman Avenue, or Walkling Court. Please confirm that these sensitive receptors were included in your vibration analysis, identify the existing vibration levels at these above locations, and, as required by the Secretary's Certificate, please identify specific mitigation measures for each sensitive receptor that requires mitigation.

8. A total of 19 bridges exist along the entire Green Line Extension Corridor. However, only four bridges in the City of Medford are affected by the project - Harvard Street, College Avenue, Winthrop Street, and North Street in Medford.

L-006-019

The Winthrop Street Bridge has inadequate horizontal clearance to accommodate a 4-track (2 Commuter Rail and 2 light rail) system and, thus, would need full replacement to lengthen the main span. The College Avenue Bridge has adequate clearance to accommodate a 4-track system but may need replacement due to its proximity to the proposed College Avenue Station and the subsequent need for a wider cross section to accommodate a new Green Line center platform. The North Street Bridge has adequate horizontal clearance but should be evaluated to confirm its structural integrity. Although the abutments are sufficiently spaced apart, the rail bridge superstructure over Harvard Street needs to be widened to accommodate two additional Green Line tracks. It appears that this widening will impact the vertical clearance beneath the rail bridge, as Harvard Street is concave beneath the bridge. Consequently, it may be that the profile of Harvard Street would need to be lowered to maintain an acceptable clearance. Currently, the section of Harvard Street under the bridge floods in high rain events. Should the profile of Harvard Street need to be altered to maintain vertical clearance due to widening of the bridge the MBTA should address this flooding issue as part of that roadway project.

The FEIR should provide detailed construction staging plans for the reconstruction of each of these bridges and explain how both vehicular and pedestrian traffic is to be maintained throughout the reconstruction activities. These staging plans are essential to determine the impact to emergency response personnel, abutters, and the traveling public. If needed, identify specific detour routes for vehicles as well as pedestrians.

Issue Specific Comments

Air Quality

The document appears to be reasonably thorough and, for the most part, uses methodologies that are consistent with current EPA/DEP guidance. However, as discussed below, a number of issues with the analysis limit the verification of the accuracy of the results. Missing data and methodology details would need to be provided by the author to check the accuracy. However, the errors and inaccuracies described are not likely significant enough to change the overall conclusions presented in the Report, which states that the build alternatives would provide air quality benefits when compared to the No-Build Alternative.

L-006-020

Compliance With the Secretary's Certificate on the Expanded Environmental Notification Form

- The Certificate requires reporting of emission inventory results for CO and PM2.5, these results are not presented in the Report; and

L-006-019

As stated in DEIR/EA Section 3.7.2, the College Avenue and Harvard Street Bridges are identified for replacement as part of the Green Line Extension Project. Vertical clearance at these bridges will be given further consideration during preliminary engineering. Drainage under the Harvard Street Bridge will be evaluated during the preliminary engineering phase of the Project. In the Future Full-Build Alternative, both the Winthrop Street and North Street Bridges would require reconstruction.

Detour routes and emergency access during construction will be developed during preliminary engineering as part of the Traffic Management Plan. At least one bridge will need to be closed during construction (Medford Street), therefore a detour will be proposed. A temporary bridge may be able to maintain traffic for thereconstruction of Broadway Bridge. For all other bridges, at least one lane of traffic will be maintained during construction. Pedestrian and vehicular access to abutting properties will be maintained at all times. Project bridge designs and construction staging plans will be refined during preliminary engineering.

L-006-020

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

L-006-020

- Quantitative PM10 and PM2.5 hotspot assessments that were not required in the Certificate were included in the analysis using methodology that is not currently endorsed by EPA or FHWA, and therefore the reported results may be misleading to the public.

Affected Environment – Section 4.7

- Report does not provide description of modeling methodology for the Microscale Commuter Rail Evaluation; and

Environmental Consequences – Section 5.6

- The 1-hour CO background concentration is suspect and the 8-hour CO background concentration is not presented;
- No description of the development of PM10/PM2.5 background concentrations is provided;
- The project-opening year, or construction completion year, is not included in the analysis; and
- As required in the Certificate, an attempt to provide a greenhouse gas emission inventory comparison between the alternatives is provided. However, it is incomplete. Although greenhouse gas emissions are calculated for on-road motor vehicles, there is no accounting of greenhouse gas emissions for electricity generation to power the extended Green Line.

Noise and Vibration

The Noise and Vibration Sections of the subject document contain a complete noise and vibration assessment report and methodology, similar to that which would be developed for an Environmental Impact Statement (EIS). The document appears to be reasonably thorough and utilizes methodologies that are consistent with current general practice, as defined in the Federal Transit Administration (FTA) guidance manual *Transit Noise and Vibration Impact Assessment* (Report FTA-VA-90-1003-06, May 2006). The document also complies with the Secretary's Certificate for Noise and Vibration.

L-006-021

However, we would like to point out several portions of the assessment which may be lacking in detail, or which may provide a less than adequate and balanced perspective to the possible noise and vibration exposure to residents that live close to the proposed project. The following presents a summary of our concerns.

Existing Environment – Noise (4.8)

- The background discussion for noise may under emphasize the meaning of the measurement scale (dB) as it relates to human annoyance. For the reader who is not familiar with noise measurements, the quantitative results of the assessment may render the predicted noise level increases as less of an annoyance than will actually be experienced.
- The assessment relies on estimations of 24-hour Ldn from a one-hour noise measurement. This technique could lead to inaccurate characterization of the existing noise level that, in turn, can lead to inaccurate predictions. The report should have included more 24-hour measurements at more locations, especially in parts of Medford other than where Tufts University is located.

Environmental Consequences – Noise (Section 5.7)

- The summary statements imply that there will be no noise impacts with mitigation; however, several mitigation options may not work for practical reasons resulting in higher levels of impact than the report indicates. The FEIR should address these conditions and the consequential reduction in impact mitigation.

L-006-021

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. Construction measures to mitigate construction noise and vibration impacts will be further defined during preliminary engineering.

L-006-021

- Construction noise impacts are not adequately analyzed, such as effects from required nighttime construction and other operations that are likely to be very disruptive. The FEIR should analyze in detail the types of equipment to be used and the time and frequency of operation and the likely impact from construction operations.
- The report lacks detail to determine impact levels and likely forms of mitigation at individual buildings, and how well the mitigation is expected to perform. The report should include a list of all impacted buildings, the type of mitigation, and whether the mitigation in practice is capable of reducing noise levels sufficiently.
- Noise source reference details for MBTA trains, equipment, and maintenance yard activities are not complete and therefore it is not clear if the assessment is adequate. The report should include an appendix that lists all noise sources including the expected variation in the assumed noise levels.
- The methodology used to determine receptor locations and allocation of measurement data to establish impact criteria is not provided. It is possible that more measurements should have been conducted in areas of Medford other than near Tufts University buildings.

Existing Environment - Vibration (4.9)

- Train vibration measurements were only performed at one location near the Tufts University sports fields and appear to have neglected the residential portions of Medford to the north and south of this area. Additionally, the vibration data shown in the report does not indicate the variation between different MBTA trains, which can be 15 VdB or more. This could lead to inaccurate predictions, or predicted levels that are less than the levels that may actually occur. This issue should be explained in the FEIR.
- The assessment does not include any mention of vibration sensitive businesses in Medford, such as a possible research and development facility that may be sensitive to vibration. As such operations do exist in Medford in and around the Tufts campus, the FEIR should document these uses and either document that increased vibrations will not impact operations or propose sufficient mitigation to manage documented impacts.
- The EA/DEIR does not and the FEIR should include a technical appendix listing equipment used, certifications, etc.
- The discussion and assessment only pertains to effects felt by people. The background discussion should have included some discussion for assessment of possible house damage caused by large displacement oscillations of the rail track.

Environmental Consequences – Vibration (5.8)

- The performance of the proposed vibration mitigation options (ballast mats and resilient fasteners) is not sufficiently referenced and the stated performance levels (10 to 15 VdB for ballast mats) may be greater than what can be practically achieved. This may result in higher vibration levels to nearby residents than proposed. The report should either be more realistic about mitigation, or provide references of actual post installation tests, not conducted by manufacturers, to substantiate claims.
- The number of vibration impacts and vibration levels in the section between Medford Hillside and Mystic Valley Parkway seems proportionally less than other sections of the project. Also, no ground propagation tests were performed in areas to the north and south of the Tufts University ground propagation measurement site. Either more tests and analysis should be performed, or at least an explanation for the inconsistent data should be provided.

L-006-021

- The listing of vibration impacts does not include detailed information for each receptor making it difficult to determine the level of vibration to be expected at each building location. The document should include a list of all affected buildings, including predicted levels and mitigation details.

Constructability

L-006-022

Typical MBTA requirements for Maintenance and Protection of Railroad Traffic state "***under no circumstances shall any equipment or materials be placed or stored within fifteen (15) feet from the centerline of the outside track***." Although in the EA/DEIR it was noted to maintain minimum horizontal and vertical offsets from live track centerlines to work zones and structures, how prevalent is the condition where the referenced 15-foot offset cannot be achieved? In such circumstances it is understood this restriction may require additional off-peak hour work construction. The FEIR should identify all areas requiring that construction occur at night and/or weekends and for any such locations the duration/type of construction activities together with proposed mitigation should be described.

L-006-023

While land acquisitions were discussed for the project, temporary and permanent easements are not addressed in the EA/DEIR. The Certificate required that temporary and permanent construction easements be identified. Consequently, the FEIR should provide a detailed study and investigation of the existing topographic conditions, construction staging, contractor work zone and laydown requirements, contractor construction equipment anticipated to be utilized, potential contractor access/egress locations and major construction tasks to be performed. The information obtained will enable the preliminary temporary and permanent easements to be determined.

L-006-024

The EA/DEIR notes the railroad bridge that carries the MBTA Lowell Line over Harvard Street will have to be reconstructed to add two spans to accommodate four tracks. The bridge inspection report indicated the existing substructure and superstructure require rehabilitation for reuse to satisfy the proposed Green Line projects design life. We recommend documentation regarding these required improvements be provided by the project proponent. As mentioned previously, FST questions if the Harvard Street bridge has adequate vertical clearance based on existing conditions and the need for potential improvements to the Harvard Street alignment under future build conditions. These roadway improvements may also impact the existing utilities such as drainage, wastewater, and water located within the roadway. We recommend the vertical clearance under existing and future build condition be documented as per MassHighway Bridge Manual and that the need for roadway improvements, if applicable, including impacts to the existing utilities, be addressed by the project proponent.

Wastewater and Water

The EA/DEIR does not address or comment upon potential impacts to specific existing wastewater facilities at any of the proposed three station locations, at any of the five bridges, or along the existing train corridor in the City of Medford. The online existing conditions drawings show some manholes, but do not show the pipelines associated with these manholes. The drawings do not indicate whether there are any utilities on the five bridges. Concerning the generation of wastewater at the proposed stations, the EA/DEIR makes one general comment regarding the use of low-flow and waterless fixtures to minimize water consumption and wastewater generation. There are no quantities given for the generation of

L-006-025

wastewater at the stations or any discussion on how the stations will be sewered. The FEIR should indicate projected wastewater volumes and confirm with the City of Medford that capacity exists to accommodate the projected volumes. The presence/absence of utilities on bridges impacted by the

L-006-022

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

L-006-023

As indicated in DEIR/EA Section 3.7.1, a more comprehensive review of easement requirements will occur once more detailed final design plans are prepared. The final design will minimize both land acquisitions and any construction easements to the extent practical.

The MBTA has existing access rights to egress locations along the existing commuter rail right-of-way. These existing access locations such as 20 Vernon Street will be utilized during construction. Property rights for the Project will be secure before an NTP is issued to the contractor. This will allow the contractor to immediately clear station sites such as 350 Medford Street for laydown areas.

L-006-024

MassDOT will gladly coordinate with the City of Medford on its findings related to bridge replacement needs. Designs for bridges, including clearances, associated roadway areas, and impacted utilities will be advanced during preliminary engineering. MassDOT has and will continue to coordinate with the City of Medford at appropriate milestones as the Project progresses. This will help ensure compliance with legal

L-006-025 project should be noted and, as appropriate, their accommodation during construction staging of the appropriate bridges noted.

L-006-026 Regarding water service, there is no discussion on this topic in the EA/DEIR. While water usage is anticipated to be low, the FEIR should document coordination with the City of Medford regarding capacity available to service Station demands.

Transportation

In general, based on EA/DEIR assumptions related to how far new riders will travel to each station and the low percentage of those riders arriving in cars, the traffic analysis is (with limited comments) adequate and does not depict meaningful impacts to the City of Medford.

However, the EA/DEIR's projections of station-by-station ridership demands are based in part on an assumption that the catchment area for each station is one mile. Based on this assumption, ridership is divided between walking, bicycle, buses, and drop-off/pick-up. Regarding drop-off/pick-up, the EA/DEIR assumes that only five percent of riders will arrive in this manner uniformly for each station. Because the proposed design for the Ball Square Station proposes no area for drop-off/pick-up while College Avenue Station only provides 7 spaces and the Route 16 station only provides 14 spaces, it is critical to traffic operations that both the size of each station's catchment area and the percentage of drop-off/pick-up arrivals be correct. These assumptions are also critical for both traffic operations and parking demand. The EA/DEIR states these values but does not provide documentation to support these assumptions. The FEIR should document that the assumed five percent rate is reasonable based on recorded activity at other urban end-of-the-line stations. For instance, Oak Grove and Forest Hills are end-of-the-line stations on the Orange Line. What is the experience at these locations with the adequacy of short-term parking and what happens when Orange line service is delayed and drivers start to stack up waiting for delayed riders? Where will an ever-increasing number of vehicles wait at Ball Square without impacting traffic flow on busy streets adjacent to this station?

L-006-027

Additionally, the FEIR should document why a one-mile catchment area is reasonable. Particularly for potential riders north of Route 16 with little alternatives to, say, College Avenue Station in less then two miles, it seems unlikely that drop-off will not be an attractive option. If the catchment area was extended such that due to distance, say two miles, very few new riders would access the station on foot, then what happens with the demand for drop-off and long term parking near these end-of-the-line stations? Without a detailed explanation supporting the catchment area and related pick-up/drop-off and even parking demand at these end-of-the-line stations, a final conclusion on traffic impacts is not possible.

The FEIR should also discuss how the MBTA will monitor both drop-off/pick-up activity along with commuter parking on residential streets for the demand cases ultimately documented in the FEIR.

Stormwater

L-006-028 While not expressly subject to the state's Stormwater Standards, the Proponent has committed to comply with these requirements. This is a major environmentally positive commitment on the part of the project. We suggest, however, that while much has been done, the FEIR needs to enhance this effort to document full compliance with these standards. The attached memorandum on stormwater discusses additional steps that should be documented in the FEIR.

Visual

The most significant change would be the loss of forested areas along the right-of-way, reducing the green space visible from local residential areas. In a city like Medford, the tree-lined buffer

requirements and, to the extent feasible, consistency with planning and other projects.

L-006-025

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

L-006-026

During preliminary engineering, MassDOT will coordinate with utilities providers to minimize impacts to existing utilities, including water sources.

L-006-027

The ridership demands are based on the assumption that the catchment area for pedestrians is one mile from each station. The catchment area for all modes of transportation (including driving as appropriate by alternative) includes the entire 164 community area in the CTPS regional travel demand model.

The pick-up/drop-off percentages are based on a 2007 CTPS survey undertaken to understand the use by station and mode of drop-offs at transit stations across eastern Massachusetts. The survey showed that within the urban core surface rail stops generally have between three and seven percent drop-off activity. More detailed information is provided in the transportation section of the Draft EIR.

between the existing rail lines and the houses and businesses means a lot to the community character of the neighborhoods and to Tufts University.

The wide stand of trees along Boston Avenue across from the Tufts campus buffers the rail corridor. The University's Tisch Library, at the top of the hill, overlooks this stand of trees. The partial loss of this buffer will greatly impact the ambiance of the College.

L-006-029

We recommend that the entire Medford stretch of the Green Line Extension be reviewed again for the FEIR, from a visual point of view, with an eye to the elevation of the abutters in relation to the elevation of the rail corridor.

We recommend also that the existing tree buffer be inventoried before it is removed. The City of Medford has a policy that if trees are removed, the same number of caliper inches need to replaced with new trees in the project. If the trees needed to replace the tree buffer do not fit in the project area, new trees could be planted on the streets of the City of Medford in the neighborhoods adjacent to the project area.

L-006-028

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

L-006-029

MassDOT has and will continue to coordinate with municipalities such as the City of Medford at appropriate milestones as the Project progresses. This will help ensure compliance with local requirements such as tree replacement and, to the extent feasible, consistency with planning and other projects.

Fay, Spofford & Thorndike

Memorandum

To: Ed Hollingshead, AICP

From: Gary Hebert, PE, PTOE

Date: December 11, 2009

Re: Peer review Transportation– Green Line Extension Project Draft Environmental Impact Report, Environmental Assessment, and Section 4(f) Statement (referred to as 'the EA/DEIR') - EOEA # 13886

Traffic Impacts Overview

This peer review focuses on the probable traffic impacts of the Green Line Extension Project in Medford as they pertain to vehicular, pedestrian, and bicycle traffic for the Proposed Project (short term) with a College Avenue Station terminus and the Preferred Alternative (long term) with a Mystic Avenue/Route 16 terminus. The referenced EA/DEIR concludes that the traffic impacts of the Green Line Extension Project are expected to be minimal following construction.

A review of the EA/DEIR indicates that City of Medford traffic-related issues are addressed in several parts of that document including:

- Chapter 4 – Affected Environment, Sub-section 4.6
- Chapter 5 – Environmental Consequences, Sub-section 5.5
- Chapter 6 – Draft Section 61 Findings and Mitigation Commitments
- Appendix A: Responses to Comments on the EENF
- Appendix F: Traffic Analysis

The Green Line Extension Project includes three potential stations within or adjacent to the City of Medford. The Proposed Project includes Ball Square and College Avenue Stations located entirely within the City of Medford. In the long term, the Preferred Alternative extends Green Line service northwestward to a proposed Mystic Avenue/Route 16 Station located in the City of Somerville just northwest of the Medford line. Implementation of the Route 16 Station involves the purchase of two properties within the City of Medford. The Preferred Alternative assumes none of the proposed Green Line Extension stations in Medford will include park and ride facilities. A total of 7 drop-off/pick-up spaces will be provided at

the College Avenue Station, and approximately 14 drop-off/pick-up spaces will be provided at the eventual Mystic Valley Parkway/Route 16 Station. None are proposed for the Ball Square Station.

The EA/DEIR indicates that traffic impacts in Medford will be minimal or beneficial. Detailed traffic analysis sheets in the EA/DEIR traffic technical appendix (Appendix F) indicate that there will be only small differences between the Build and No-Build traffic conditions. However, AM and PM peak hour diagrams showing the projected differences in traffic volumes between alternatives were not provided in EA/DEIR or its appendices for direct comparisons.

There are two key assumptions made in the EA/DEIR that led to the presented ridership forecasts and to the resulting conclusions that traffic impacts associated with the Green Line Extension Project will be minimal.

Specifically, the ridership analysis methodology described in Appendix F of the EA/DEIR indicates that it is assumed that the "catchment area" of a transit station is defined as being within one mile of the station's location, regardless of access mode. This assumption, therefore, includes buses, drop-off/pick-up, bicycles, and walking.

The assumed size of the catchment area sets a limit on the population served by each station and, thus, the potential ridership levels that the service might attract. One of the key consequences of this limited-size catchment area is that future ridership estimates assume *that commuters living to the north and west of the new Medford Green Line stations at distances greater than one mile will not drive to the station areas and park their vehicles in nearby neighborhoods or nearby unrestricted parking spaces and walk to the Stations.* This key assumption will require intensive enforcement if it is to be achieved.

The second key assumption made in the EA/DEIR is that drop-off/pick-up riders will comprise only five percent of the ridership at each station.

Due to the critical importance of these two assumptions, it is highly recommended that the FEIR focus on documenting the validity of them with supporting data, based if possible on actual experiences at other MBTA stations already operational. Of particular interest would be their validity at end-of-the line stations such as what the College Avenue Station in Medford will be with the Proposed Project and what the Mystic Avenue/Route 16 Station will be with the Preferred Alternative. If the actual station catchment areas should prove to be larger than the assumed one mile, resulting in higher-than-anticipated station use and accordingly an increase in the number of people using each of the various access modes, traffic impacts in Medford would be expected to be different, in a negative way, from what has been anticipated in the EA/DEIR. Also, either by itself or in conjunction with a larger catchment area, an actual rate of drop-off/pick-up mode greater than the assumed five percent would potentially result in greater traffic impacts to the street system and neighborhoods surrounding the stations than was estimated in the EA/DEIR.

Detailed Comments

Chapter 4 – Affected Environment Sub-section 4.6

The existing 2008 traffic analyses were generally conducted in accordance with accepted industry procedures and included intersections cited in the December 1,2006 Certificate on the EENF and in accordance with MEPA Traffic Analysis Guidelines. Chapter 4 identifies the following signalized study area intersections within the City of Medford (from Mystic Valley Parkway southerly):

- Mystic Valley Parkway at Auburn Street east and west
- Mystic Valley Parkway at Winthrop Street
- North Street at Boston Avenue
- Winthrop Street at Boston Avenue
- Boston Avenue at College Avenue
- Boston Avenue at Harvard and Warner Streets
- Broadway at Boston Avenue (Ball Square)
- Main Street at Harvard Avenue
- Medford Square – Main Street at High, Salem, and Forest Streets, and Riverside Avenue

Additionally, the following unsignalized study area intersections located within the City of Medford were evaluated in Chapter 4 of the EA/DEIR:

- Boston Avenue at High Street/Sagamore Avenue
- College Avenue at George Street
- Main Street at George Street
- Main Street at Mystic Avenue
- Main Street at South Street/Mystic Valley Parkway EB Ramps (potential future signal location)
- Main Street at Mystic Valley Parkway WB Ramps (potential future signal location)

The EA/DEIR provided information requested in the MEPA Certificate on pedestrian activity and pedestrian mitigation measures in the vicinity of Medford stations. Figures providing AM and PM peak hour pedestrian flow volumes at Medford intersections illustrating existing and projected pedestrian crossing movements at intersections analyzed are included in the EA/DEIR. Figures presenting No-Build and Build traffic volumes are not included in the EA/DEIR.

The list of intersections selected and evaluated within the City of Medford is generally adequate, though Boston Avenue at North Street should be analyzed in the FEIR as an intersection likely to be affected during construction when the North Street Bridge is reconstructed.

An analysis for recent crash data in Medford is also included in the EA/DEIR.

Chapter 5 –Environmental Consequences Sub-section 5.5 – Traffic

The future Build and No-Build traffic analyses were generally conducted in accordance with accepted industry procedures and included intersections cited in the December 1, 2006 Certificate on the EENF. The Build year is 2030, a twenty-two-year horizon from the year 2008 existing conditions for the study. Our review of the intersections indicates that the analyses were performed in accordance with accepted procedures identified in the current Highway Capacity Manual, the industry standard. Also, the traffic impact analyses specifically were prepared to respond to the City of Medford's comment letter dated October 17, 2006.

From a 'big picture' perspective, the two following conditions have the potential to significantly affect traffic conditions in Medford.

1. Traffic conditions during construction of Proposed and Preferred Project

    - During construction of the proposed project to College Avenue Station, reconstruction of three bridges will result in traffic impacts in the City of Medford. College Avenue and Harvard Street bridges in Medford are required to be reconstructed, along with retaining walls adjacent to neighborhoods and commercial abutters. The EA/DEIR indicates that reconstruction of these Medford bridges will not require traffic diversions, while the reconstruction of the Broadway Bridge in Somerville is expected to produce traffic diversions, conceivably both in nearby Medford neighborhoods and in Somerville. We recommend that specific construction phasing plans be developed for all bridges proposed for reconstruction. This will confirm the notion that only the Broadway bridge in Somerville (next to Medford) requires traffic, pedestrian, and/or bike circulation detour plans. For all bridges for which detour plans are

necessary, these plans should be included in the FEIR. The EA/DEIR does not provide a detour plan for the Broadway bridge the one bridge that is slated for closure during reconstruction.

Reconstruction of the Winthrop and North Streets bridges and the retaining walls adjacent to residential and commercial abutters will also produce traffic impacts on the City of Medford during construction of Green Line service to Route 16. Again, detour plans, as appropriate, should be included in the FEIR for each of these bridge locations.

2. Traffic conditions with the proposed Green Line service in operation to both College Avenue Station and Route 16.

   - The potential for traffic operational issues coincident with the opening of Green Line stations primarily relates to the appropriateness of the ridership catchment areas and rate of drop-off assumed in the EA/DEIR. If the EA/DEIR's assumptions on these two issues are correct, then with the comments discussed below, traffic, pedestrian, bicycle and parking issues associated with the project are limited. However, until these assumptions are fully supported in the FEIR, transportation impacts associated with the proposed action remain unclear. These two key assumptions are discussed below.

Assumed Catchment Area and Rate of Drop-off/Pick-up

The EA/DEIR projections of traffic in 2030 are based on the premise that all drop-off/pick-up activity will originate ***within one mile of the new Green Line stations***. The validity of this assumption is particularly questionable for end-of-the-line stations. When the College Avenue and finally the Route 16 Stations represent the end of the line it seems unlikely that drop-off/pick-up activities will not be generated from distances in excess of one mile.

In fact, we note that the FTA on November 13, 2009 published a new policy request in the Federal Register Volume 74, No. 218 that states:

> "All pedestrian improvements located within one-half mile and all bicycle improvements within three miles of a public transportation stop have a *de facto* physical and functional relationship to public transportation. According to a test of activity and use, *pedestrian and bicycle improvements beyond these threshold distances may be eligible for FTA funding if the improvement is within the distance most people can be expected to safely and*

conveniently walk or bicycle to use that particular transit service."

If FTA anticipates riders bicycling up to three miles, it seems reasonable to anticipate drop-off/pick -up activities occurring within this same distance. Certainly, it seems reasonable that these activities will involve populations located beyond one mile from stations.

Even based on the catchment area and arrival modes assumed in the EA/DEIR, questions exist related to the impact of drop-off/pick-up activities on area traffic operations. The following table based on EA/DEIR data presents ridership and drop-off/pick-up at the relevant stations

As indicated in the following table, 30 drop-off/pick-up actions are projected during peak hours at the Ball Square Station **although no location for these actions to occur is proposed.** Consequently, even assuming that the projected number of actions is correct, this represents, on average, a vehicle stopping every two minutes. In the busy afternoon peak hour with on-street parking limited and vehicles arriving as other vehicles continue to await the arrival of passengers, it is reasonable to anticipate a number of vehicles parked or double parked. The FEIR should acknowledge that the EA/DEIR has not addressed this issue and identify locations where drop-off/pick-up activity can safely occur at Ball Square. Without this identification, traffic operations in Ball Square are likely to be impacted by double-parked vehicles.

Future Station	Peak Hour Drop-off/Pick-up demands*	Total Daily Drop-off/Pick-up demands*	Total Daily Riders at Station*
Ball Square Station	30/30	90/90	1,800/1,800
College Avenue	40/35	115/100	2,300/2,000
Mystic Valley Parkway/Route 16	NA/42	NA/120	NA/2,400

Data Source: EA/DEIR Chapter 5 and Appendix F
*Proposed to College Station/Preferred to Route 16
NA – Not Applicable

The preceding table also suggests that the EA/DEIR projects a uniform five percent of the total riders for the Medford Green Line Extension stations is expected to come from drop-off/pick-up activity; the rest will either be arriving by walking, biking, or bus. The EA/DEIR indicates this is typical for such stations. Given the dense urban locations these stations are proposed for, the surrounding high traffic volumes, and the total lack of Station parking at Ball Square and the very limited parking at the College Avenue and Route 16 stations, this assumption of five percent is an important assumption. Again, the FEIR should document that this is a reasonable assumption based on actual behavior at other MBTA end-of-the-line

stations. Simply doubling the drop-off/pick-up rate to 10 percent could have meaningful peak hour implications for each of the proposed stations.

Additionally, it is recommended that the potential drop-off/pick-up 'catchment' area be extended to locations within a 5- to 10-minute *drive* of the College Avenue and Ball Square Stations; e.g., up to two plus miles upstream from each station. Because the MBTA does not propose park and ride facilities at either of the two Medford Stations, we would anticipate higher-than-projected demands for drop-off/pick-up activity from locations more than one mile distant. For instance, the EA/DEIR indicates that an evaluation of demand for parking at the Route 16 Station supported a demand for 300 parking spaces. Although not proposed, this suggests that there is a demand to reach the extended Green Line that exceeds the EA/DEIR's assumed one-mile catchment area. This in turn suggests that drop-off/pick-up activity may be higher than assumed.

Parking

Observations and parking inventory findings presented in the EA/DEIR confirm there are opportunities for parking within 500 feet of the new Medford Stations.

Any available spaces may be subject to use, particularly by motorists picking up passengers in the afternoon and evening or for longer-term parking. Because some Medford neighborhoods have neighborhood parking permit programs, it may be less likely that motorists will attempt to park and ride in neighborhoods. However, with an increased likelihood of more riders driving to stations, the potential for more vehicles on Medford streets exists pending resolution on the catchment and drop-off/pick up assumptions in the FEIR.

Chapter 6 –Section 61 Findings and Mitigation Commitments

Review of Traffic Mitigation measures in the EA/DEIR indicates traffic impact mitigation is proposed at only two intersections in the City of Medford—Boston Avenue at College Avenue (with the Proposed Project) and Boston Avenue at Winthrop Street (with the Preferred Alternative).

The latter intersection requires removal of 12 on-street parking spaces on Boston Avenue for an intersection upgrade that involves re-striping and signal modifications only. According to the data contained in the EA/DEIR, the Project increases intersection traffic by approximately 3 percent during the PM peak hour or approximately 60 trips per hour out of nearly 2,000 trips per hour projected to enter the intersection. The projected level of service with the change modifies the operation from LOS F in both the No-Build and the unmitigated Build to LOS D. AM analysis for this intersection with the Proposed Project was not available for review. While removing on-street parking does improve PM peak hour operations from LOS F to LOS D, it could adversely affect local businesses on Boston Avenue that may rely on an available supply of on-street parking. The FEIR should address this potential impact.

Similarly, the addition of an exclusive-right-turn lane on Boston Avenue at College Avenue, according to the EA/DEIR analysis sheets, improves the overall LOS from an LOS F with both the No-Build and unmitigated Build to LOS D with the mitigated Build. There are drawbacks with the exclusive-right-turn lane. It is located at a busy pedestrian crossing and will conceivably make the crossing more difficult. Provision of an exclusive right-turn lane next to the station within a few feet of the station's proposed drop-off/pick-up location could be problematic from a safety perspective if drop-off/pick-up vehicles queue back into the travel lane on Boston Avenue. Since a portion of the drop-off demands may come from the north, U-turning on Boston Avenue may also become a safety issue, as the proposed alignment for the drop-off/pick-up area is for vehicles to enter facing northbound.

As noted above, the addition of an exclusive-right-turn lane at this location is not pedestrian-friendly, as it creates a longer crossing of College Avenue at the station and encourages higher-speed right turns from College Avenue to Boston Avenue near the proposed drop-off/pick-up lane at the future station. Analysis of the projected volumes indicates that accommodation of the slight increase in traffic at the College Avenue intersection should be balanced by the need to enhance pedestrian flow to and from the station and to monitor (enforce) potential overflow of drop-off/pick-up activity at the seven spaces that may be well used throughout the day. If, as expected, drop-off/pick-up demands are higher than projected, motorists may be double-parked or encroach on parking areas in nearby neighborhoods. We suggest that FEIR revisit this issue.

As listed below, a total of 12 intersections is proposed for pedestrian enhancements in Medford. Of these, four involve pedestrian signal enhancements, two involve wheel chair ramp enhancements, and six involve signs or crosswalk markings only. One of the two wheelchair ramp enhancement locations has already been implemented by the City of Medford. Because the City routinely maintains crosswalk markings, it is assumed that the new markings would need to be reviewed with the City for applicability.

- Mystic Valley Parkway at Auburn Street: - Signalize side street crossings and increase pedestrian walk/flashing don't walk time
- Mystic Valley Parkway at Winthrop Street - Increase pedestrian walk/flashing don't walk time
- Boston Avenue at North Street - Upgrade pedestrian signal heads and increase pedestrian walk/flashing don't walk time
- Boston Avenue at Winthrop Street - Re-stripe crosswalk markings

- Boston Avenue between Winthrop Street and College Avenue - Install warning signage for mid-block crossing
- Boston Avenue at Harvard Street - Re-stripe crosswalk markings
- College Avenue between Boston Avenue and Frederick Street - Signal warrant analysis for possible mid-block pedestrian signal; install if warrants are met
- College Avenue at George Street - Install wheelchair ramps and re-stripe crosswalk markings
- Main Street at George Street - Install wheelchair ramps and add crosswalk markings
- Main Street at Mystic Valley Parkway ramps - Re-stripe crosswalk markings
- Main Street at Harvard Street – Re-stripe crosswalk markings
- Main Street at Mystic Avenue – Re-stripe crosswalk markings

Of the above mitigation measures, the intersection of Boston Avenue with North Street requires additional wheel chair ramps to become ADA compliant and the intersection of Main Street at George Street has recently been upgraded to include new wheel chair ramps and a crosswalk.

As mentioned previously, the FTA on November 13, 2009 published a new policy request in the Federal Register Volume 74, No. 218 that states impacts that could be eligible for FTA funding. We recommend that the Green Line Extension project conform to these distances, should the FTA policy be adopted.

The EA/DEIR indicates that during the peak hours 700-800 pedestrians an hour will access the Ball Square and College Avenue Stations in Medford. At a minimum, if these demands are to occur, sidewalks within ½ mile of the Medford Stations should be addressed from an ADA enhancements perspective. Sidewalks with narrow passageways or rare missing sidewalks, or accessible pedestrian routes that are not compliant with current ADA requirements, should be improved under this Project.

Additional Mitigation Measures

The EA/DEIR in Tables 6-1 and 6-2 commits to working with the Cities (including the City of Medford) to develop station-area parking enforcement plans. It would be appropriate to cite specific examples of what types of actions the Proponent would commit to in working with the City in the FEIR. For instance, monitoring of pick-up/drop-off activity at both stations and before/after surveys of parking demands in residential neighborhoods generated by Green Line riders would be useful. Should these prove to be issues, the Proponent should suggest what next steps would be committed to.

Additionally, should projected drop-off/pick-up estimates be meaningfully understated based on future monitoring, and nearby intersections become an issue with unforeseen double parking and/or congestion, we would recommend the Proponent establish a contingency fund to assist the City in dealing with potential traffic and parking problems.

Substantial bicycle activity was observed on streets in the vicinity of the proposed two Medford Green Line Extension stations at Ball Square and College Avenue during early December. It is recommended that the City also request the Proponent for funds, potentially eligible under the proposed FTA regulation cited above, to address enhancement of bicycle circulation facilities in the vicinity of the stations to improve bicycle access to the Stations. We note that bike lanes were recently added on Broadway in Somerville in the vicinity of the proposed station at Ball Square, but there are none on streets in the vicinity of the proposed Ball Square or College Avenue stations in Medford. We suggest that the MBTA commit to a comprehensive study to identify a system of bike routes in Medford between abutting residential neighborhoods and the proposed stations.

Stormwater

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MEMORANDUM

TO: Ed Hollingshead, AICP

FROM: David Glenn, P.E.

DATE: December 4, 2009

PROJECT: DEIR/EA EEA Number 13886
Green Line Extension
Medford, MA.

SUBJECT: Stormwater Review

As requested, Fay, Spofford & Thorndike, LLC. (FST) has performed a review of the Stormwater Management Plan associated with the above referenced Environmental Assessment/Draft Environmental Impact Report (EA/DEIR) for the Green Line Extension Project. Materials received to date include DEIR/EA Volume 1, dated October 15, 2009 as prepared by Vanasse Hangen Brustlin, Inc (VHB).

In regards to stormwater, the Secretary's Certificate on the Expanded Environmental Notification Form (EENF) required the DEIR to include an overall drainage plan and demonstrate the stormwater management system will comply with the DEP Stormwater Management Standards, including water quality and quantity during construction and post development. The DEIR should include an operations and management plan of the stormwater management system and identify stormwater discharge points and describe any drainage impacts associated with required off-site improvements.

The EA/DEIR, Chapter 5.9 Stormwater provides a general discussion on the above referenced items. FST offers the following comments on the proposed stormwater management system, specifically for compliance with the DEP Stormwater Management Standards.

A) Standard No.1 requires no untreated stormwater discharges or erosion to wetland resource areas.

The DEIR/EA notes a new underdrain system will be constructed along the MBTA commuter rail corridor that will connect to the existing drainage trunk lines beyond the railroad corridor that discharge to the Mystic River. Stormwater runoff from the Ball Square Station will discharge into the existing Harvard Street Drainage. Runoff from the College Avenue Station and Mystic Valley Parkway/Route 16 Station will be directed to the Mystic Valley Parkway/Route 16 Station drainage system, which

discharges to the Mystic River. **FST recommends additional documentation be provided to demonstrate discharge velocities from the existing and proposed outfalls will not cause erosion or scouring at the point of discharge or downstream.**

B) *Standard No.2 requires peak flow attenuation (i.e. no increase in peak stormwater discharge rates).*

A summary table of the net impervious surface changes by station identifies an increase in impervious area for each of the three stations located in Medford. The increase in impervious area consisting of new pavement and rooftops varies from 0.4 to 0.6 acres. Stormwater runoff from each station will discharge into an existing municipal drainage system. **FST recommends a hydraulic analysis for the 2-, 10- and 100-year storms be provided that assesses the potential impacts of the increase of peak flow and volumes to the existing municipal drainage systems.**

C) *Standard No. 3 requires the loss of annual recharge to groundwater be minimized through the use of infiltration measures and annual recharge from post-development shall approximate the annual recharge from pre-development conditions.*

The EA/DEIR provided a general discussion on infiltration systems to be utilized as a component of the stormwater management system based on existing soil conditions. As previously noted, the proposed three stations in Medford will result in the increase in impervious, thereby resulting in a loss of annual recharge to groundwater. **We recommend additional documentation be provided to demonstrate the annual recharge from post-development shall approximate the annual recharge from pre-development conditions and the use of Low Impact Development (LID) measures to be considered.**

D) *Standard No. 4 requires the stormwater management system include a series of Best Managements Practices (BMPs) to demonstrate a total suspended solids (TSS) removal rate of at least 80 percent. Where there is more than one outfall, each outfall shall achieve 80% TSS removal prior to discharge.*

The DEIR/EA states where need, TSS removal would be accomplished by way of a proprietary water quality device. **FST recommends the proposed Stormwater BMP's and TSS Removal Calculation Worksheet be provided for each station to demonstrate compliance.**

E) *Standard No. 5 requires the use of specific stormwater management BMP's from Land Uses With Higher Potential Pollutant Loads (LUHPPLs).* **Does not apply.**

F) *Standard No. 6 Critical Areas.* **Does not apply.**

G) *Standard No. 7 Redevelopment Project.* **Does not apply.**

H) *Standard No. 8 requires an erosion and sedimentation control plan be implemented to prevent impacts during construction and land disturbance activities.*

The erosion and sedimentation control narrative provides a general discussion on controls to be utilized during construction phases of the project. We recommend a more detailed discussion be provided identifying items such as sequence of construction, limits of phasing and placement/type of erosion control measures

I) *Standard No. 9 requires all stormwater management systems have an operation and maintenance plan to ensure the systems function as designed.*

The stormwater operations and maintenance program needs to address the frequency of inspection/cleaning of the proposed Stormwater BMP's. The program should also identify the stormwater management system owner and parties responsible for operation and maintenance of the stormwater facilities.

J) *Standard No. 10 Prohibition of Illicit Discharges.*

The standard has not been addressed in the EA/DEIR.

Wastewater

Fay, Spofford & Thorndike

Memo

To: Richard A. Azzalina

From: Robert H. Letourneau, P.E.

Date: November 20, 2009

Re: Peer Review of Greenline Extension DEIR/EA
Regarding Wastewater Facilities in Medford

Draft Environmental Impact Report/Environmental Assessment and Draft Section 4(f)
Evaluation for Greenline Extension Project into the City of Medford

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I have reviewed on-line the above mentioned document as it pertains to the proposed Greenline Extension project into the City of Medford. The subject report does not address or comment upon potential impacts to specific existing wastewater facilities at any of the proposed three station locations, at any of the five bridges, or along the existing train corridor in the City of Medford. The online existing conditions drawings show some manholes, but do not show the pipelines associated with these manholes. The drawings do not indicate whether there are any utilities on the five bridges. Concerning the generation of wastewater at the proposed stations, the report makes one general comment regarding the use of low-flow and waterless fixtures to minimize water consumption and wastewater generation. There are no quantities given for the generation of wastewater at the stations or any discussion on how the stations will be sewered.

Bridges

ENGINEERS FST Since 1914

FAY, SPOFFORD & THORNDIKE, LLC

ENGINEERS • PLANNERS • SCIENTISTS

5 Burlington Woods, Burlington, Massachusetts

MEMORANDUM

TO: Ed Hollingshead, AICP

FROM: John Haladay, PE

DATE: December 11, 2009

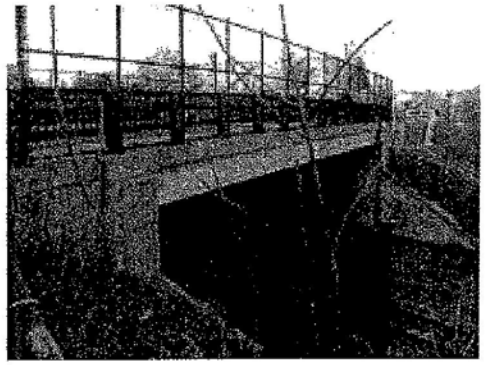
SUBJECT: Bridge Review Peer Review Green Line Extension Project
EA/DEIR and 4 (f) Statement EEA # 13886

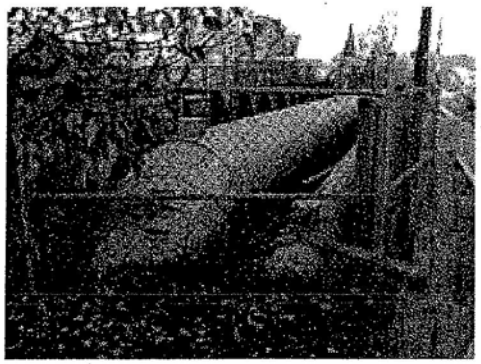
College Avenue Over MBTA Commuter Rail, Medford (M-12-012)

The bridge is a single-span, prestressed concrete slab bridge supported by wall abutments. The bridge was constructed in 1997.

The bridge was last inspected on July 17, 2009. The Routine Inspection Report indicates that:
Item 58, Deck, is rated 8 – Very Good.
Item 59, Superstructure, is rated 8 – Very Good.
Item 60, Substructure, is rated 8 – Very Good.

Immediately to the north of the existing bridge is a separate utility bridge that supports two large pipes.





The Green Line project DEIR documentation suggests that this bridge requires replacement, due to horizontal constraints for fitting two new tracks below the structure.

Discussion:

- There may be lateral clearance for two additional tracks. Because the existing structure is in very good condition, and because of the difficulties of construction at this site (discussed below), the Green Line Project should carefully review options to fit new tracks in the existing right-of-way without replacing the bridge. The DEIR suggests that the existing commuter rail tracks should be moved 13 feet in the alignment to the east. New Green Line tracks would be placed to the west.

- A new Green Line College Avenue Station is proposed on the alignment north of the College Avenue Bridge. Placement of a new station requires additional track right-of-way width, from 61 feet without the station to a maximum of 81 feet at the station. Ideally, the new proposed College Avenue Station location should be coordinated to minimize track width requirements so that the existing bridge could be reused. To do so requires a study of station siting and track widths as the station location is placed at some distance to the north of the bridge crossing.

If it is determined that the bridge requires replacement due to track width requirements, the following is a discussion of impacts and issues:

- Construction at this site for a new bridge is very constrained. The existing intersection of College Avenue and Boston Avenue is immediately to the west of the west abutment of the bridge. The intersection appears to be congested for many parts of the day. In addition to vehicular traffic, the intersection has very heavy pedestrian traffic from Tufts University.

- Construction of a temporary bridge at this site will be difficult. Immediately to the south is the existing post office/Tufts lounge building. To the north is an existing utility bridge, with further site constraints posed by Boston Avenue and a Tufts administrative building and parking lot.

- For a new, longer span, it may be possible to construct the replacement bridge one half at a time:
  - Build a section of the new bridge wide enough for one lane of traffic to the north of existing with new connections for utilities. To minimize right-of-way and alignment impacts, demolish part of northern face of existing bridge (as much as possible while still providing service for two lanes of traffic).
  - Relocate College Avenue WB onto new section. Demolish additional section of new bridge, providing service still for one lane.
  - Construct more of new bridge, providing service for College Avenue EB.
  - Demolish remaining existing bridge, complete new bridge. The new bridge would be wider than existing, thus providing a right-turn-only lane from College Avenue WB to Boston Avenue NB.

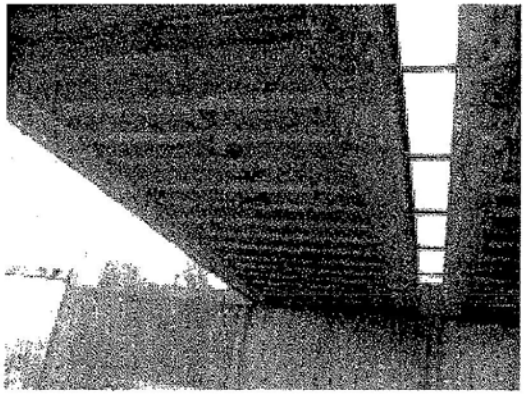
- The existing bridge is the only connection between the main part of the Tufts University campus and athletic facilities and support buildings on the east side of the tracks. Furthermore, the bridge provides access to one of the main Tufts University parking lots on the east side of campus adjacent to Cousins Field. As a result, the bridge supports a very heavy demand for pedestrian traffic. Any construction scheme will need to maintain unfettered pedestrian access at all times during the academic year. This requirement potentially may be lessened during the summer months when school is not in session.

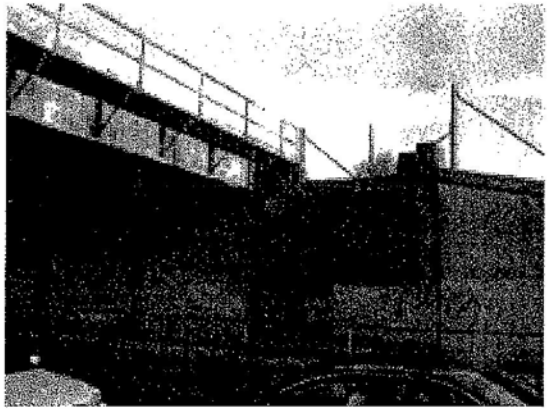
- College Avenue rises in a steep grade from the east approach to cross the tracks. Should the span be lengthened, the vertical control point for this crossing will likely need to be moved further to the east down College Avenue. A careful study will be needed to confirm roadway grade elevations for access along the right-of-way, in particular for Tufts University Halligan Hall to the north, and the Cousins Parking Lot to the south.

- The Green Line Project Full Build will require replacement of Winthrop Street over MBTA Commuter Rail (see also separate discussion). Winthrop Street, along with Harvard Avenue, provides the potential for detours around College Avenue. Should the work proceed with the Full Build option, it will probably be necessary to avoid limiting service to both the College Avenue and Winthrop Street crossings at the same time.

MBTA Commuter Rail over Harvard Street – (M-12-011)

The bridge is a single-span, steel girder floor beam bridge supported by wall abutments. The bridge consists of two separately framed spans supported by the continuous wall abutments





The Green Line project DEIR documentation suggests that this bridge can be widened to support two new tracks crossing Harvard Street.

Discussion:

- The existing crossing of Harvard Street originally had four tracks. Two of the tracks and the superstructure were removed. The wall abutments remain. Assuming the abutments are sound, it should be possible to build new spans in the available slots.
- The Commuter Rail tracks crossing the existing spans are placed at the center of the crossing. Two new spans would be constructed to the east and west of the existing spans. The Commuter Rail tracks would be shifted to the east, using part of the existing

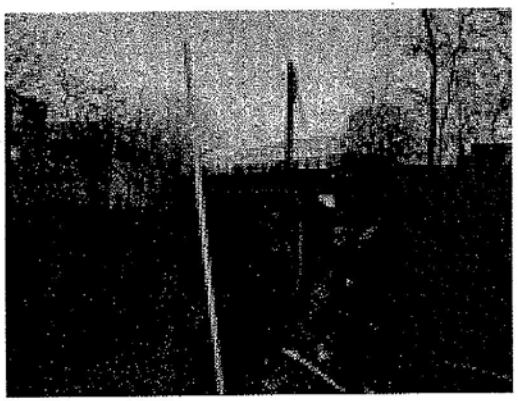
span and one new span. Likewise, the Green Line tracks would be placed on the existing span and one new span to the east.

- The inspection report suggests that the existing substructure and superstructure require some rehabilitation for reuse to satisfy the proposed Green Line project's design life.
- The schedule for new construction and rehabilitation work at Harvard Street should be carefully coordinated with other needed bridge construction/reconstruction for the Green Line project, in particular work at College Avenue.

Broadway Over MBTA Commuter Rail - (S-17-013)

The bridge is a single-span, steel stringer bridge supported by wall abutments. The bridge was constructed in 1973.

The bridge was last inspected on October 24, 2008. The Routine Inspection Report indicates that:
Item 58, Deck, is rated 7 –Good.
Item 59, Superstructure, is rated 6 – Satisfactory.
Item 60, Substructure, is rated 6 – Satisfactory.



The Green Line project DEIR documentation suggests that this bridge requires replacement, due to horizontal constraints for fitting two new tracks below the structure.

Discussion:

- The existing span appears to be not long enough to provide space for two new tracks below in the right-of-way.
- The crossing site at Ball Square is heavily congested. Construction staging for a new crossing will require careful coordination with abutters and traffic on Broadway.

- Due to right-of-way limitations, it appears that construction of a temporary bridge may be difficult. It may be possible to reconstruct the bridge half at a time, providing a minimum of two lanes of service on Broadway.

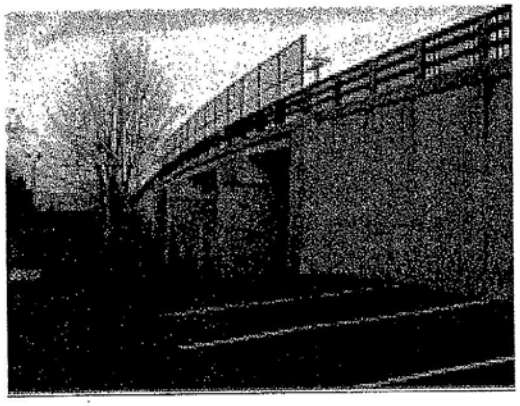
- Broadway rises in a sharp grade to cross the tracks. For a new, longer span, the vertical control points for this crossing will likely need to be shifted to the east and west. A careful study will be needed to confirm roadway grade elevations for access along the right-of-way for abutters.

Bridges potentially impacted by the Green Line Full Build Option to Mystic Valley Parkway:

North Street Over MBTA Commuter Rail (M-12-014)

The bridge is a three-span, prestressed concrete slab bridge supported by wall abutments and piers. The bridge was constructed in 1997.

The bridge was last inspected on July 17, 2009. The Routine Inspection Report indicates that:
Item 58, Deck, is rated 8 – Very Good.
Item 59, Superstructure, is rated 8 – Very Good.
Item 60, Substructure, is rated 8 – Very Good.



The Green Line project DEIR documentation suggests that this bridge may be reused as part of the Full Build option. Sufficient room is present to fit two new tracks below the structure.

Discussion:

- The inspection report and field visit suggest that the bridge is in good condition and suitable for reuse as part of the Green Line Full Build option. Minor rehabilitation of pavement, joints, and concrete walls may be needed.

- The span layout of the existing bridge is such that new tracks would be placed under each of the approach spans. The Commuter Rail NB track would be shifted to beneath the east approach span, and the SB track would remain under the main span but shifted to the east. New Green Line tracks would be placed under the main span and west approach span. The tracks for both facilities would need to take into account the existing wall piers separating the main span from approach spans.

- Existing traffic patterns in the residential areas to the east of the bridge limit access for through traffic to the south. Unless the pattern of one-way streets is temporarily changed during construction of the other bridges (at Winthrop Street and College Avenue), the North Street crossing would not be useful as a detour route.

- The current approach of North Street to the east of the bridge rises in a very sharp grade that appears to be substandard.

Winthrop Street Over MBTA Commuter Rail (M-12-013)

The bridge is a single-span, steel stringer bridge supported by wall abutments. The bridge was constructed in 1984.

The bridge was last inspected on January 16, 2008. The Routine Inspection Report indicates that:
Item 58, Deck, is rated 7 –Good.
Item 59, Superstructure, is rated 7 –Good.
Item 60, Substructure, is rated 7 –Good.



The Green Line project DEIR documentation suggests that this bridge requires replacement, due to horizontal constraints for fitting two new tracks below the structure. Discussion:

- The existing span appears to be not long enough to provide space for two new tracks below in the right-of-way.

- The crossing site is adjacent to the intersection of Winthrop Street and Boston Avenue. It is in a heavily congested commercial area. Construction staging for a new crossing will require careful coordination with abutters and residential owners on Winthrop Street and Boston Avenue. In particular, one abutter has a driveway access to Winthrop Street immediately to the northeast of the existing bridge.

- Due to right-of-way limitations, it appears that construction of a temporary bridge may be difficult. It may be possible to reconstruct the bridge half at a time, providing a minimum of two lanes of service on Winthrop Street.

Constructability

ENGINEERS **FST** Since 1914 *FAY, SPOFFORD & THORNDIKE, LLC*

To: Richard A. Azzalina, P.E.

From: John Haladay, P.E.

Date: December 3, 2009
Regarding Constructability Issues in Medford

Subject Draft Environmental Impact Report/Environmental Assessment and Draft Section 4(f) Evaluation for Green Line Extension Project into the City of Medford

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Comments contained herein are with regard to the **"Draft Environmental Impact Report/Environmental Assessment and Section 4(f) Statement Volume 1"** dated October 2009.

The Certificate of the Secretary of Environmental Affairs on the Expanded Environmental Notification Form for the Green Line Extension, dated December 1, 2006, states the following on pages 13 and 14:

"***Construction Period Impacts***

The EIR should include a discussion of construction phasing, evaluate potential impacts associated with construction activities and propose feasible measures to avoid or eliminate these impacts. It should note whether any blasting will be required. The EIR should identify temporary and permanent construction easements. The proponent must comply with DEP's Solid Waste and Air Quality Control Regulations during construction. The proponent should implement measures to alleviate dust, noise, and odor nuisance conditions (including rodent control), which may occur during construction."

With reference to Chapter 3 Section 3.7.6 **Construction Sequencing and Staging**, FST has reviewed the Report and has the following review comments:

1) Construction Zones and Lay Down Areas

A statement is made that there is limited space for construction zones and lay down areas within or near the rail corridor. There is no general discussion of the various contractor work zone size and lay down area requirements that would be anticipated to complete the tasks associated with the work. Typical Construction Staging Figures 3.7-37 and 3.7-38 are not representative of the various site conditions that will be encountered within the railroad corridor. Further studies need to be completed to develop additional Typical Construction Staging sketches that will enable a further detailed discussion of the \

potential constraints and conditions to be encountered. The discussion should also address contractor work zone requirements for the equipment and work to be performed. Also addressed should be whether or not there are any potential contractor lay down areas available off-site. If it is determined that potential sites do exist, their locations should be identified.

2) MBTA Lowell Line Commuter Rail

The existing MBTA commuter rail service must be maintained throughout construction. With train service on the Lowell Line being provided on weekdays and weekends, work directly impacting the train service will be limited to off-peak daytime and nighttime work. This issue should be discussed for the major construction work tasks that will be performed to properly evaluate and address when the daytime and nighttime impacts will be occurring.

3) MBTA Lowell Line Commuter Rail

As noted in Section 4.5.2.1 **MBTA Lowell Line**, there are 21 inbound and 21 outbound weekday commuter train runs. Weekend and holiday service consists of eight inbound and eight outbound train runs. The times of these train runs should be documented for the current schedule, particularly noting the times of the first trains in the morning and the last trains at night. For work activities occurring adjacent to and in close proximity to the easterly side of the commuter rail tracks, the MBTA will place restrictions on how close to the tracks and what type of work can be performed with regard to Green Line construction. It is anticipated that for much of the work in this area that is directly adjacent to the railroad tracks there will be a requirement for off-peak-hour nighttime work. This requirement should be addressed and discussed for the major construction work tasks that will be performed to properly evaluate and address the potential nighttime impacts to the residential neighborhoods.

4) Maintenance and Protection of Railroad Traffic

Typical MBTA requirements state "***under no circumstances shall any equipment or materials be placed or stored within fifteen (15) feet from the centerline of the outside track***". Although in the report it was noted the necessity to maintain minimum horizontal and vertical offsets from live track centerlines to work zones and structures, it must be determined how prevalent is this condition. It is understood this restriction may require additional off-peak-hour work construction. Whether most of the work will be done in the day or night should be documented.

5) Existing Freight Rail Service

Freight rail service must also be maintained throughout construction, and maintaining this service has implications for construction staging. There is no mention of hours of freight rail operation on weekdays and weekends. As with the commuter rail line, work directly impacting the freight service will be limited to off-peak-hour work. The noise, vibrations, dust, and air quality will negatively affect the residential and commercial neighborhoods as well. This situation should be addressed and discussed for the major construction work tasks that will be performed to properly evaluate and address the daytime and nighttime impacts to the neighborhoods.

6) Land Acquisition

While land acquisitions were discussed in the EA/DEIR for the project, temporary and permanent easements were not addressed. The Certificate required that temporary and permanent construction easements be identified. As noted above, a more-detailed study and investigation of the existing topographic conditions, construction staging, contractor work zone and lay down requirements, contractor construction equipment anticipated to be utilized, potential contractor access/egress locations, and major construction tasks to be performed are needed. The information obtained will enable the preliminary temporary and permanent easements to be determined.

7) Construction Staging and Sequencing

Activity for the new Green Line extension will be dictated by the number and type of bridges to be reconstructed, traffic detours, alternate construction by-pass routes, pedestrian access, commuter rail service, freight rail service, access to commercial and residential areas, contractor work zone requirements, contractor lay down requirements, contractor access/egress requirements, temporary easement requirements, and Life Safety vehicular access. These are items, issues, and concerns that need to be properly addressed during the initial planning and permitting stages. A more detailed study and investigation is warranted to further evaluate, understand, potentially address, and make additional recommendations at this stage to fulfill the EIR requirements.

8) Reconstruction of Harvard Street bridge

Harvard Street's profile as it passes under the rail bridge is concave. In heavy rain events, water ponds in this depression directly under the rail bridge. Given its concave shape, as the rail bridge is widened its eastern and western edges will extend toward the sections of Harvard Street that are at an angle. At these points it is possible that the clearance between Harvard Street and the expanded edges of the rail bridge will be reduced such that they could impact trucks. The Build case clearance at this location should be established in the FEIR. If the existing clearance is reduced such that an impact to vehicular traffic occurs, the proponent may need to adjust the grade of Harvard Street. In such an event, the proponent should address the flooding issue at this location as part of a redesign of Harvard Street.

Air Quality

KM Chng Environmental Inc.

MEMORANDUM

To: Ed Hollingshead (FST)

From: Tim Lavelle (KM Chng)

Subject: EOT Green Line Extension – EIR/EA
- Air Quality Review

Date: 4 December 2009

As requested, we have reviewed the document *Draft Environmental Impact Report/ Environmental Assessment and Section 4(f) Statement* for the Green Line Extension Project (EEA #13886). Our objective was to review the completeness, methodology, and data assumptions for the air quality analysis conducted for the Project.

SUMMARY

The document appears to be reasonably thorough and, for the most part, uses methodologies that are consistent with current EPA/DEP guidance. However, as discussed below, a number of issues with the analysis limit the verification of the accuracy of the results. Missing data and methodology details would need to be provided by the author to check the accuracy. However, the errors and inaccuracies described are not likely significant enough to change the overall conclusions presented in the Report, which states that the build alternatives would provide air quality benefits when compared to the No-Build Alternative.

The following brief summary points identify issues with the document's compliance with the Secretary's Certificate and also problems with missing or incomplete methodology details and data within the air quality sections of the Report. For more explanation of the summary points, this Summary section is followed by a section of Detailed Comments addressing each of the bulleted summary points.

Compliance With the Secretary's Certificate on the Expanded Environmental Notification Form

- The Certificate requires reporting of emission inventory results for CO and PM2.5, these results are not presented in the Report; and
- Quantitative PM10 and PM2.5 hotspot assessments that were not required in the Certificate were included in the analysis using methodology that is not currently endorsed by EPA or FHWA, and therefore the reported results may be misleading to the public.

Affected Environment – Section 4.7

- No description of PM10/PM2.5 persistence factors used to estimate 24-hour and annual results from the 1-hour modeled results is provided;
- Report does not provide description of modeling methodology for the Microscale Commuter Rail Evaluation; and
- The emissions inventory does not present results for CO or PM2.5.

Environmental Consequences – Section 5.6

- The 1-hour CO background concentration is suspect and the 8-hour CO background concentration is not presented;
- No description of the development of PM10/PM2.5 background concentrations is provided;
- The project-opening year, or construction completion year, is not included in the analysis; and
- As required in the Certificate, an attempt to provide a greenhouse gas emission inventory comparison between the alternatives is provided, however it is incomplete. Although greenhouse gas emissions are calculated for on-road motor vehicles, there is no accounting of greenhouse gas emissions for electricity generation to power the extended Green Line.

Air Quality Appendix

- The air quality study protocol is not provided in the Report Appendix for public review;
- It appears that the 8-hour CO concentration results were calculated incorrectly;
- It appears that there are multiple issues with the MOBILE motor vehicle emission factor modeling;
- There are issues with the background concentrations used in the CAL3QHC hotspot modeling for CO, PM10, and PM2.5; and
- There are data input issues with the emission factors used in the CAL3QHC hotspot modeling.

DETAILED COMMENTS

Compliance With the Secretary's Certificate on the Expanded Environmental Notification Form

- The air quality scope in the Secretary's Certificate requires that "the analyses should analyze the following emissions: VOC, NOx, greenhouse gases, carbon

monoxide, particulate matter (PM) and air toxics." Although it appears that CO and PM2.5 emissions were estimated for each alternative as data files in the Air Quality Appendix indicate, the results for these two pollutants are not presented in the EIR.

- The scope requires that the microscale analysis examine localized hotspots for CO concentrations only. Because the study area is located in an attainment area for PM10 and PM2.5 (meaning that EPA recognizes this area as meeting the regulated ambient air quality standards for these pollutants), there are no requirements for including PM10/PM2.5 hotspots in the analysis, and even more so for not including a *quantitative* analysis. Even if PM10/PM2.5 hotspots were required, current Transportation Conformity guidance endorsed by FHWA and EPA calls for *qualitative* assessments only. The agencies are currently in the process of finalizing *quantitative* methodology for PM10 and PM2.5 hotspots in conjunction with the completion and distribution of the MOVES emission factor model, which is scheduled to be released by the end of 2009. Therefore, PM10/PM2.5 modeled concentrations may not be accurate. The results presented are potentially misleading, and should not be included in this Report. This comment also applies to the PM2.5 hotspot analysis conducted for the Microscale Commuter Rail Evaluation, which has further questionable issues described under the Affected Environment section below.

Affected Environment – Section 4.7

- The section describes persistence factors used and how they were developed for modeling 8-hour CO concentrations, however no explanation of persistence factors is provided for the 24-hour PM10 and PM2.5 concentrations or annual PM2.5 concentrations. The persistence factor is used to estimate pollutant concentrations for longer averaging time periods than the 1-hour concentrations predicted by the modeling.
- The Report provides no description of the modeling methodology or the model used in the analysis for the Microscale Commuter Rail Evaluation.
- As discussed previously, meeting compliance with the Secretary's Certificate requires that the existing conditions mesoscale analysis include estimates of PM2.5 and CO emissions, which are not presented in the Report.

Environmental Consequences – Section 5.6

- As in the Affected Environment section, no persistence factors are provided for the PM10/PM2.5 hotspot modeling, no description of methodology for the Commuter Rail Evaluation is provided, and the mesoscale analysis does not present CO or PM2.5 emission results.
- The NAAQS for lead was revised to 0.15 ug/m^3 in October 2008. Table 5.6-1, *National Ambient Air Quality Standards*, should be updated to reflect this revision. This edit has no effect on the analysis or results.
- EPA recommends using the maximum applicable concentration from the last 3 years of monitoring data as the background concentration for microscale modeling. It appears that background concentrations used in the analysis were

extracted from a report published in 2006. No 8-hour CO background concentration is presented in the Report.

- Although PM10 and PM2.5 background concentrations used in the hotspot analyses are presented, no description of how the concentrations were developed is provided. Also, it is unusual to see a 24-hour PM10 background concentration (23 ug/m^3) that is less than the 24-hour PM2.5 background concentration (29.7 ug/m^3), which, again, leaves the PM10/PM2.5 modeling suspect.
- Because of Federal and State-mandated emission controls, which reduce motor vehicle emission rates in future years, the project-opening year (or construction completion year) can often show higher emissions and concentrations than the project-design year. Therefore, the project-opening year is usually included in the air quality analysis for transit projects. The project-opening year for the Green Line Extension was not included in the analysis.
- Greenhouse gases are not a local or regional issue, but a global issue. Although greenhouse gas emissions were estimated for study-area on-road motor vehicle traffic, there is no accounting of emissions from power plants providing the electricity to power the Green Line Extension.

Air Quality Appendix

- The Certificate requires that a study protocol be developed for the Project. Although the Report text alludes to DEP consultation regarding development of the study protocol, the accepted protocol should be included in the Air Quality Appendix for public review.
- It appears that the 8-hour CO concentrations were calculated incorrectly. The analysis uses the 1-hour modeled concentration plus the background concentration multiplied by the persistence factor to calculate the 8-hour values, instead of applying the persistence factor to the 1-hour modeled concentrations and then adding in the 8-hour background concentration. Since no 8-hour CO background concentration is presented in the Report, the 8-hour CO concentration results could not be verified. Since PM10 and PM2.5 persistence factors are also not presented, the modeled microscale results for PM10 and PM2.5 could not be verified.
- Based on the review of the MOBILE emission factor model inputs, there appear to be multiple issues with the emission factor modeling for the 2007 and 2030 calendar years including: vehicle registration data, I/M program data, anti-tampering program data, diesel rebuild effects, diesel sales fractions, ambient temperatures, RVP values and diesel sulfur content. This means that emission factors developed for the project are not completely accurate according to the latest guidance from DEP.
- CAL3QHC CO files show a background ambient concentration of 5 ppm, not 3 ppm as presented in the Report.
- CAL3QHC PM10/PM2.5 files show all free flow links having 0.0 g/mi emission factors. This under-estimates the concentrations estimated for the PM10/PM2.5 microscale analyses. However, as noted previously, quantification of

PM10/PM2.5 hotspot concentrations is not endorsed by FHWA/EPA and this error just leads to further misinterpretation of the results presented in the Report.

- CAL3QHC PM10/PM2.5 files show a background ambient concentration of 5 ug/m^3, which does not match any of the background concentrations presented in the Report. Therefore, based on issues already discussed, and errors of this magnitude, all air quality modeling for this project is considered suspect.

Although there are obvious errors in parts of the analysis, the overall conclusions presented in the Report would not likely change if the errors were corrected.

Noise and Vibration

KM Chng Environmental Inc.

MEMORANDUM

To: Ed Hollingshead (FST)

From: Martin Brien (KM Chng)

Subject: EOT Green Line Extension - EA
- Noise and Vibration Preliminary Review

Date: 25 November 2009

As requested, we have reviewed the document *Draft Environmental Impact Report/ Environmental Assessment and Section 4(f) Statement* for the Green Line Extension Project (EEA #13886). Our objective was to review the completeness and methodology of those documents with regard to possible noise and vibration exposure to neighbors of the project, with particular concern for the portions of the project within Medford city limits.

SUMMARY

The Noise and Vibration Sections of the subject Environmental Assessment (EA) document contain a complete noise and vibration assessment report and methodology, similar to that which would be developed for an Environmental Impact Statement (EIS). The document appears to be reasonably thorough and utilizes methodologies that are consistent with current general practice, as defined in the Federal Transit Administration (FTA) guidance manual *Transit Noise and Vibration Impact Assessment* (Report FTA-VA-90-1003-06, May 2006). The document also complies with the Secretary's Certificate for Noise and Vibration, as stated in the EA.

However, we would like to point out several portions of the assessment which may be lacking in detail, or which may provide a less than adequate and balanced perspective to the possible noise and vibration exposure to residents that live close to the proposed project. The following presents a summary of our concerns. The summary is followed by a detailed account with references to the EA document providing specific reasons for the concerns.

Environmental Consequences – Noise (Section 5.7)

- The summary statements imply that there will be no noise impacts with mitigation; however, several mitigation options may not work for practical reasons resulting in higher levels of impact than the report indicates. The report should address these conditions and the consequential reduction in impact mitigation.
- Construction noise impacts are not adequately analyzed such as effects from required nighttime construction and other operations that are likely to be very disruptive. The report should analyze in detail the types of equipment to be used and the time and frequency of operation and the likely impact from construction operations.
- The report lacks detail to determine impact levels and likely forms of mitigation at individual buildings, and how well the mitigation is expected to perform. The report should include a list of all impacted buildings, the type of mitigation, and whether the mitigation in practice is capable of reducing noise levels sufficiently.
- Noise source reference details for MBTA trains, equipment and maintenance yard activities is not complete and therefore it is not clear if the assessment is adequate. The report should include an appendix that lists all noise sources including the expected variation in the assumed noise levels.
- The methodology used to determine receptor locations and allocation of measurement data to establish impact criteria is not provided. It is possible that more measurements should have been conducted in areas of Medford other than near Tufts University buildings.

Environmental Consequences – Vibration (5.8)

- The performance of the proposed vibration mitigation options (ballast mats and resilient fasteners) is not sufficiently referenced and the stated performance levels (10 to 15 VdB for ballast mats) may be greater than what can be practically achieved. This may result in higher vibration levels to nearby residents than proposed. The report should either be more realistic about mitigation, or provide references of actual post installation tests, not conducted by manufacturers, to substantiate claims.
- The number of vibration impacts and vibration levels in the section between Medford Hillside and Mystic Valley Parkway seems proportionally less than other sections of the project. Also, no ground propagation tests were performed in areas to the north and south of the Tufts University ground propagation measurement site. Either more tests and analysis should be performed, or at least an explanation for the inconsistent data should be provided.
- The listing of vibration impacts does not include detailed information for each receptor making it difficult to determine the level of vibration to be expected at each building location. The document should include a list of all affected buildings, including predicted levels and mitigation details

Existing Environment – Noise (4.8)

- The background discussion for noise may under emphasize the meaning of the measurement scale (dB) as it relates to human annoyance. For the reader who is not familiar with noise measurements, the quantitative results of the assessment may render the predicted noise level increases as less of an annoyance than will actually be experienced.
- The assessment relies on estimations of 24-hour Ldn from a one-hour noise measurement. This technique could lead to inaccurate characterization of the existing noise level that, in turn, can lead to inaccurate predictions. The report should have included more 24-hour measurements at more location, especially in parts of Medford other than where Tufts University is located.

Existing Environment - Vibration (4.9)

- Train vibration measurements were only performed at one location near the Tufts University sports fields and appear to have neglected the residential portions of Medford to the north and south of this area. Additionally, the vibration data shown in the report does not indicate the variation between different MBTA trains, which can be 15 VdB or more. This could lead to inaccurate predictions, or predicted levels that are less than the levels that may actually occur.
- The assessment does not include any mention of vibration sensitive businesses in Medford, such as a possible research and development facility which may be sensitive to vibration.
- The assessment should have included a technical appendix listing equipment used, certifications, etc.
- The discussion and assessment only pertains to effects felt by people. The background discussion should have included some discussion for assessment of possible house damage caused by large displacement oscillations of the rail track.

KM Chng Environmental - DETAILED COMMENTS

Affected Environment – Noise (4.8)

1. 4.8.1 Introduction, page 4-63, the first paragraph may under emphasize the meaning of a sound pressure decibel by stating that a 3 dB change is a "barely noticeable change outside the laboratory", whereas a "10 dB change would typically be perceived as a doubling (or halving) in loudness". The reference for this statement is not given. Earlier research (e.g. Stevens, 1956), suggests this phenomenon; however, other research indicates that there is a range of 1-3 dB that is noticeable to many people and that a 6-10 dB difference is generally perceived as a doubling in loudness (e.g. Warren 1970). This is particularly true of louder sounds (above approximately 70 dBA). It should be noted that all physics reference texts define a doubling of sound pressure level as 6 dB. The term "loudness" is a psycho-acoustic term which can be confusing to the general public. Also, the discussion does not mention possible practical effects of project noise increases, such as levels which would limit normal speech, require extreme level adjustments in telephones and television sets, levels which might cause elevated stress, or learning disabilities, etc.
2. Table 4.8-1 Exiting Noise Measurement Results, page 4-67, the use of long term and short term measurements in the same column is confusing. For the short-term measurements, apparently Ldn was estimated, and shows a significantly larger variability (58-80 dBA) compared to the long-term measurements. This result casts some doubt on the use of these types of data and their consequent veracity in describing the existing environment. The data indicate that it would be perhaps less speculative to omit the short term Ldn "measurements" from the assessment, or else measurements should have been obtained using a measurement system that had been recording data for a complete 24 hours period.
3. 4.8.3.2 Noise-Sensitive Land Use, page 4-68 to 4-70, the discussions for each section of the project corridor do not explain the specific reasons for the variations in measured sound level. The short-term levels vary from 59 to 80 dBA, which is a large range for a generally homogeneous urban area. Although the introduction states that, in general, the measured noise levels were dominated by the heavy rail activity (commuter and Amtrak trains), the assessment does not describe adequately the noise contributions from other sources. Since the Ldn near train corridors will mostly reflect the level and duration for train events, the reader would not know whether the area is otherwise relatively quiet or noisy. For example, why is the Ldn at LT-1 64 dBA at 60 feet from the nearest track, whereas the Ldn at LT-9 is 71 dBA, which is also 60 feet from the track? Also, if there is significant variation in noise levels between different MBTA trains, the assessment does not account for this.

4. For the record, it would have been useful to have a technical appendix that lists the type and model of microphone, sound level meters, and other equipment or software used to measure the existing environment. The text mentions that audio recordings were made; however, there is no mention of anything learned from the audio recordings, assuming that observation personnel were not deployed for the full 24-hour measurement periods.

Affected Environment – Vibration (4.9)

1. 4.9.1 Introduction, page 4-71, the discussion briefly explains the common use of velocity amplitude to measure vibration levels for transportation projects. However, the text does not mention the relationship of ground displacement to certain types of structural damage. In some cases, a relatively large displacement of the rail, which can be caused by poorly maintained wheels and wheel truck suspensions, can cause cracks in surface building materials such as wallboard joints, and occasionally hairline cracks in concrete blocks and other similar rigid building materials.
2. 4.9.2 Methodology, page 4-72, the assessment only utilized one location to measure commuter train levels at Tufts University Alumni Field, and two other locations in Somerville to measure vibration propagation characteristics of the soil. In the interest of Medford residents living in dwellings north of the Tufts University athletic fields, the assessment should have included both existing train vibration measurements and soil/ground propagation measurements in this area between the proposed College Avenue station and the Mystic Valley station.
3. 4.9.4 Existing Vibration Conditions, page 4-73, the discussion and Figure 4.9-2 do not indicate how many trains were measured or what variation in levels were recorded. The range of levels can be significant since MBTA equipment on other lines has shown large variations, and receptors can be exposed to levels 10 dB or more greater than the average (KM Chng Greenbush Study).
4. 4.9.5 Vibration-Sensitive Land Use, pages 4-74 to 4-76, although the general discussion states that vibration is "generally dominated by trains" on the MBTA commuter rail lines, the individual discussion for each section do not identify any other source of vibration. It seems unlikely that there would not be any other vibration sources, such as heavy trucks on uneven pavement. If other sources exist, it might be helpful to know what and where they are, and what the typical levels are, to compare them to commuter rail levels.
5. 4.9.5 Vibration-Sensitive Land Use, page 4-76, the assessment only mentions Tufts University buildings as sensitive land use. According to Medford city officials, there may be corporate R&D facilities in this section, which employ hundreds of Medford residents that may also be sensitive to project induced vibration effects.

6. As stated for the noise section, it is useful to include a technical appendix, which would at least contain a list of the measurement equipment, software, and any techniques that would be required to obtain results similar to those shown in the assessment.

Environmental Consequences – Noise (5.7)

1. 5.7.1.3 Noise Reference Levels, page 5-107, the data presented for noise reference levels does not contain details to explain the appropriateness of using the Green Line D Branch data. There is no technical appendix to show this data so that others can assess it. For example, can it be assumed that the rail and track system that will be used for the Green Line Extension will be the same as the D Branch? What is the variance for the measured D Branch data? Is the Lmax of 81 dBA an average of all the data that was used, or a worst-case sample? The value used for wheel squeal for the green line vehicles (Lmax = 86 dBA) may be reasonable; however, the FTA manual indicates that the level could be as high as 100 dBA (SEL = 136 dBA
2. 5.7.1.3 Noise Reference Levels, page 5-107, the data presented does not include any information relating to noise sources associated with the maintenance facility. Without this information, it is difficult to determine whether the noise generated from this facility is reasonably accounted for.
3. 5.7.1.3 Noise Predication Model, page 5-107, the description does not provide details explaining how the receptor locations were determined. It would be helpful to know if the positions were determined from current aerial photography, or perhaps older mapping data. If so, were receptors and buildings checked by on site inspection? How was it determined whether to use indoor or outdoor locations, and where can one find the exact point where the calculation was made? Assuming this type of information is available, it might be helpful to residents who would like to check whether the point used for the calculation is appropriate to them.
4. 5.7.1.3 Noise Predication Model, page 5-107, the description does not give details as to where and how noise levels from measurement locations were mapped to receptor locations to determine impact criteria. It is possible that some locations may have a higher or lower impact criteria because a noise level was used from a measurement location several hundred feet away, which a resident of the area may dispute as being typical for their residence. This is a technical problem which could lead to inaccurate results
5. 5.7.2 Noise Impacts, Table 5.7-1 and 5.7.-2, these tables aggregate the data for several individual locations into clusters of 1 to 19 buildings. We understand that this is necessary to avoid long tables with as many as 188 individual buildings. However, without a technical appendix providing data for each building, it is difficult for reviewers, residents or concerned citizens to determine what level of noise individual locations would be subjected to. It seems unlikely that clusters of as many as 19 buildings would be the same distance from the near track and would be subject to the same impact criteria. We would suggest that the assessment report should at least include readings for every building in the appendix.

6. 5.7.2 Noise Impacts, Table 5.7-1, there is an error in the totals for Potential Noise Impacts where the totals for the segment between Fitchburg Mainline and Medford Hillside Alternatives 1, 2, 3, and 4 should be 120 moderate impacts and 46 severe impacts. In addition, there are errors in the number of impacts for each of the alternatives in Tables 5.7-1 and 5.7-2 and the totals in the Impact Summary Table 5.7-3. Note that impacts refer to individual buildings and not units within buildings.

7. 5.7.2 Noise Impacts, page 5-113, in the first paragraph the text states, "typically, this increase [1-2 dB due to the green line trains] is not perceptible to humans". This statement appears to be based on cumulative calculated numeric Ldn values. However, in reality, because the frequency of green line trains is higher than commuter trains, it is likely that the noise from the green line trains will be perceptible when events occur. It should be noted that in many cases the noise from the green line trains, although not as noisy as the commuter trains, will easily be heard above background noise, and the cumulative effect of the two trains passing by at different intervals might be more annoying to residents than this statement suggests.

8. 5.7.2.1 Temporary Construction Noise Impacts, this paragraph only contains a cursory review of generic construction activity and suggests that "temporary noise impacts could result from construction activities...". In all likelihood construction activity will result in considerable noise impact to the various neighborhoods for perhaps a prolonged period of time. In addition, it may be necessary to conduct operations during nighttime when the impact is more severe. A more detailed accounting of likely construction activities, and a quantitative analysis relating noise levels to the predicted project noise levels would be useful to provide town officials and residents with a clearer picture of the real noise impact of the project. Such data could also be useful at a later stage of the project so that appropriate mitigation and its costs can be factored into the true cost of the project.

9. 5.7.3 Noise Mitigation, page 5-118, in the first paragraph it is noted that "at some locations projected to be exposed to noise impact, noise barriers may not be feasible or effective". There appears to be a wide range of areas for which noise barriers are prescribed earlier in the report; however, for various reasons will no be possible. The extent to which noise barriers, which are listed in Table 5.7-4 are unlikely to be a feasible alternative could have been shown in a separate table or figure. Table 5.7-4 may portray a misleading view of the level of mitigation that may be possible with this project. In some cases the height, location, or lack of egress through the barrier may pose a problem that may limit the use of barriers in other project areas than those mentioned. It should be noted that the Medford police chief and fire chief are concerned about possible safety issues associated with tall massive barriers. Although it is understood that barrier design details are not worked out until final design, Medford city officials would have preferred to see some perspective renderings of a typical barrier in one of the Medford neighborhoods. The generic barrier textures included in the assessment are not sufficient to portray the visual and safety consequences.

10. 5.7.3 Noise Mitigation, page 5-118, the last paragraph discusses wheel squeal on Somerville Avenue near Allen Street where rail lubrication is suggested as a mitigation technique. The discussion does not include a

rough cost estimate, as in the other mitigation options. It is possible that the cost of such an option would make this an unlikely mitigation option. It should be noted that, in the interest of exploring various mitigation options at this stage of the project, other techniques such as damped wheels, rubber wheels, flange modifications, improved wheel maintenance procedures, etc. could have been included. Ideally, a rough cost estimate, or explanations of practicality, might be included so that the likelihood of implementation might be assessed.

11. 5.7.3 Noise Mitigation, page 5-119, the last paragraph states that "the proposed noise barriers, potential sound insulation, and rail lubrication would be effective in mitigating all potential noise from the Project". However, to the extent that all these mitigation options are actually not feasible, this assumption is not valid. Therefore the summary statement "there would be no moderate or severe noise impacts from the Project" is likely to be inaccurate.

12. 5.7.3.1 Construction Noise Mitigation, page 5-119, the list of mitigation options is cursory and generic. It would have been useful to develop more detail for this potentially very significant noise problem for the project, including possible required nighttime activities.

Environmental Consequences – Vibration (5.8)

1. 5.8.1.2 Vibration Reference Levels, page 5-124, the section "Planned Operations" states that Green Line tracks will be on ballast and tie including a "boat section" which is a concrete slab approximately 2 to 3 feet thick. It is not clear from the discussion that follows in the section "Vibration Reference Levels" that the Green Line D Branch data, used for reference levels, is equivalent to the concrete slab mounting. The type of mounting can have an effect on vibration propagation. It would help to have a sentence stating that the concrete slab design was properly accounted for in the assessment process.

2. 5.8.1.2 Vibration Reference Levels, page 5-124, the text shows a range of 63 to 69 VdB for Green Line cars, and a range of 74 to 87 VdB for MBTA commuter trains. The discussion is not clear as to the actual value(s) used for level computations. It would be helpful to state the actual level used and the basis for using that particular value. It should be noted that the range of levels is consistent with measurements performed by KM Chng. The median of the range of levels is somewhat lower than the general ground surface vibration curves shown in the FTA manual for 50 mph speeds. The levels used for Amtrak trains were significantly less than the FTA vibration curve for locomotives. On occasion, KM Chng has recorded vibration levels for MBTA commuter trains that are greater than 87 dBA (MBTA Greenbush and South Coast measurements). When considering the implementation of the MBTA methodology, the large variance of MBTA commuter vibration levels should be considered. During recent measurements of the Greenbush line conducted by KM Chng, anecdotal remarks from residents living within

approximately 75 feet of the rail noted that some trains caused noticeable vibrations including "rattling of dishes and shaking of picture frames"; whereas, other trains were not discernible. This seemed to correlate with a measured range of approximately 75 to 95 VdB, normalized to 50 feet. for approximately 30 measurements. Finally, it should also be noted that the outcome of the KM Chng MBTA vibration measurement program showed that actual measured levels showed a range from 14 VdB above FEIR predictions to 12 VdB below predictions. When considered in total, the average was only 0.3 above the FEIR prediction, which indicates very good agreement with the methodology used, which Is similar to that used for this assessment. Nonetheless, it also true that, on an individual basis, several residents experienced vibration levels much greater than predicted in the FEIR.

3. 5.8.2 Vibration Impacts, page 5-127, Table 5.8-4, the aggregation of clusters of impacts and the lack of a technical appendix showing levels at individual receptors makes it difficult for the public to determine the magnitude of vibration on an individual basis.

4. 5.8.2 Vibration Impacts, page 5-127, Table 5.8-4, when comparing the impacts in the segment between Medford Hillside and Mystic Valley Parkway, to the impacts in the segment between Lechmere Station and Medford Hillside, the total number of impacts seems proportionally low. In particular, for the cluster listed as "Brookings Street", where distances to the track are similar to "Auburn Avenue near McGrath Highway", future commuter levels are 8 VdB less, and future Green Line levels are 5 VdB less at the Medford location. It would be helpful to explain these differences, particularly since it appears that ground propagation measurements were not performed in this section of the project.

5. 5.8.2.1 Temporary Construction Vibration Impacts, page 5-128, the discussion only mentions pile driving. It would be helpful to know what other activities, if any, might produce annoyance or structural damage. It would also be helpful to have an estimate for the duration and intensity of pile driving activities, and operations that may have to occur overnight.

6. 5.8.3 Vibration Mitigation, page 5-130, Table 5.8-6, much of the mitigation relies on the use of ballast mats, which are assumed to have a 10-15 VdB reduction in levels. Although this is the range of possible reduction stated in the FTA manual, there is some evidence that real world installations of ballast mats can fall short of manufacturer claims. KM Chng performed a very limited evaluation at one of the sections of the Greenbush line after the installation of ballast mats, which failed to show any significant measurable reduction in vibration level. Although the actual value used for vibration level reduction is not stated in the assessment, it would be helpful to know what the value is, and what the justification is for using that value. A similar argument might be made for the use of resilient fasteners, which can show significant variability in effectiveness, depending on several factors. We do recognize that ballast mats and resilient fasteners can be effective in reducing vibration; however, it is important to be realistic about what they can achieve. During our Greenbush vibration measurement program, some expressed the opinion that improving MBTA wheel maintenance may be a more cost effective solution to the problem of MBTA commuter train vibration levels.

Visual Impacts

Brown, Richardson & Rowe, Inc.
Landscape Architects and Planners

3 Post Office Square
Boston, Massachusetts
02110

t. 617-542-8552
f. 617-542-8517
www.brownrowe.com

December 8, 2009

Memo
To: Ed Hollingshead, FST

From: Clarissa Rowe, Brown, Richardson & Rowe

RE: **Visual Assessment Comments on the Draft Environmental Impact Report/Environmental Assessment and Section 4(f) Statement for the Green Line Extension Project in Cambridge, Somerville and Medford**

1. **Comments on the Visual Analysis Sections of the Executive Summary, and Section 4.14 " Visual Environment" in the Affected Environment, and Section 5.12 in Environmental Consequences.**

The DEIR finds that there is no negative affect to the visual quality of the City of Medford because the "natural visual resources...consist mostly of isolated, low-diversity habitat..." (page 5.) "Due to the urbanized character of the portions of Cambridge, Somerville, and Medford, and involved, there are no other significant visual resources associated with the Project" (page 4-83)

"The Proposed Project would not have a significant effect on the local visual environment. The changes proposed would occur in urbanized areas with and adjacent to the existing right-of-way and would have little visual impact on the public. The most significant change would the loss of forested areas along the right of way, reducing the green space visible from local residential areas. The addition of landscaping at the stations and both on and above the retaining walls will reduce the overall visual effect of vegetation losses. The proposed noise barriers would block the view of the right of way for adjacent homes and prevent any further visual impacts by obscuring the trains and rails that would otherwise be visible from residential back yards. "(Executive Summary, page ES-30)

The basic premise in these DEIR findings is that if the affected area is urban, there is little impact because there are so few trees and shrubs in this environment. Actually the reverse is true. Urban dwellers value their trees, even if they qualify as "isolated, low-diversity habitat", at least as much, and probably more than nonurban dwellers. In a city like Medford, the tree lined buffer between the existing rail lines and the houses and businesses means a lot to the community character of the neighborhoods and to Tufts University.

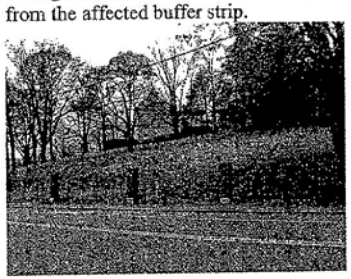


College Avenue at Tufts University



Boston Avenue near Tufts University

The wide stand of trees along Boston Avenue across from the Tufts campus buffers the rail corridor. The University's Tisch Library, at the top of the hill, overlooks this stand of trees. The partial loss of this buffer will greatly impact the ambiance of the College. Potential school applicants park in the garage right across Boston Avenue from the affected buffer strip.



ufts University fence and well kept lawn

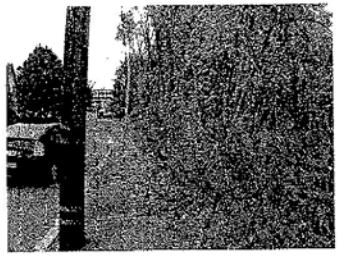


Treed buffer

Also, importantly for the citizens of Medford, the DEIR does not analyze the effects of the Green Line Extension on the small residential neighborhoods that line the rail corridor. For instance, the houses on Pigott Street are far more affected by the Green Line Extension because they are at almost the same elevation as the RR tracks. On the other hand, the small businesses at Winthrop Street are substantially above the RR alignment so they are not as affected by the visual presence of the corridor.



reed buffer at Pigott Street



Treed buffer at Picott Street

- During the final design phase, it will be important to analyze each residential neighborhood and how close it is to the existing and proposed alignment and its sidewalls. Is this study part of the final design scope of work?

- We recommend that the entire Medford stretch of the Green Line Extension be reviewed again, from a visual point of view, with an eye to the elevation of the abutters in relation to the elevation of the rail corridor. Again, is this study part of the scope of work during final design?

One's viewpoint will also change depending on which side of the tracks the viewer is standing. For instance again, the businesses and houses on Boston Avenue near the Winthrop Street are not as impacted as the residential houses that abut the same part of the corridor on the north side of the corridor, along Charnwood Road, Burget Avenue and along Colby and Winchester streets.



Charnwood neighborhood



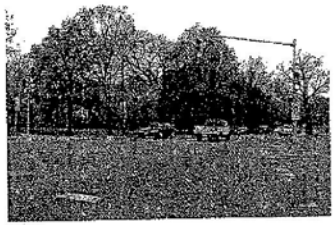
iew from Winchester Road

- Cross sections of these areas should be prepared during final design to give the residents a true idea of the future work. There should be a series of cross sections, with different sound wall surfacing options, for all the residential streets within two blocks of the rail corridor. Is this coordination part of the final design scope of work?

We agree with the finding that special attention should be paid to the Mystic Valley River parklands area.



Parklands with mature trees and grass



Boston Avenue at the insection with Route 16

"Some existing vegetation would be removed, and new retaining walls and noise barriers would be built." (page ES-41). The Overhead Catenary System, 22 feet high, will also affect the quality of the visual environment. The assumption that the new retaining walls and noise barriers will have the same value in the visual environment as trees and plants is not valid. The promise of a "green" wall is a good idea, but its execution needs to be carefully detailed and viable. Two of the photographs on page5-116 show attractive noise walls, but the other two shots are not as attractive and are less unacceptable. The MBTA needs to work with each neighborhood to work out which kind of surface there should be on the noise wall. Plants will not grow in areas where they receive no sun. Therefore making the "green" walls along the "dark" side of the corridor may not work. Growing plants at the top of the walls may be the only option in these locations.

- Is it possible to do a shadow impact study during the final design to determine whether "green" walls will work along the corridor?

Each side of the corridor needs to be thought about differently. The alignment of the corridor varies from Ball Square to College Avenue to the Mystic Valley station. Station landscaping is a pleasant idea, but its exact specifications need to be worked out and its long-term maintenance needs to be factored in. At present, there is little or

no maintenance at the other MBTA stops in the region so there is little expectation that the future will bring better maintenance to the area. The planting at the three Stations cannot take the place of the planted buffer that exists today.

2. Comments on the Mitigation Commitments for the Visual Environment and Open Space

The Mitigation chart mentions the following efforts to ameliorate the visual changes: "Provide vegetation on and/or above retaining walls to minimize visual changes", and "Work with affected communities on design of noise barriers and vegetated walls prior to construction". (p. 6-2)

Also on page two of the *Chapter of Viability of Community Path Extension to Mystic Valley Parkway*, there is a quotation from the Secretary's Certificate saying that "Also, the DEIR should evaluate the viability of extending the Community Path to Route 16 to create a connection with the Mystic River parkway." (page two).The chapter goes on to say that in the Medford section of the project, it is not viable to provide a community path along or adjacent to the corridor. The recommendation made is for a shared bike path along Boston Avenue. However, Boston Avenue is too narrow a road to encourage bike traffic. The width of Boston Avenue varies from 32 feet to 44 feet curb to curb. It is probably not viable to put a bike lane on either side of the avenue. People who use bikes often ride on the narrow sidewalks.

The report goes onto say that a Community Path is not possible in Medford, so it is important to figure out what the mitigation should be for the City of Medford.

- One recommendation is for the final design team to do an inventory of the sidewalks on both side of Boston Avenue from Ball Square to the Mystic Valley Parkway. The condition of the sidewalks and their curbing should be inventoried. Is this possible?

- In the Tufts area of Boston Avenue, the sidewalks are not in good condition, are bituminous and have outdated precast curbing. This whole sidewalk area could be updated with new concrete and granite curbing as part of the College Station improvements. Is this possible?



Bikers on concrete sidewalk near Route 16



Bituminous walk & concrete curb at College Avenue

- We recommend also that the existing tree buffer be inventoried before it is removed. The City of Medford has a policy that if trees are removed, the same number of caliper inches need to replaced with new trees in the project. If the trees needed to replace the tree buffer do not fit in the project area, new trees could be planted on the streets of the City of Medford in the neighbors adjacent to the project area. Is this possible?

3. Comments on the Visual Impacts of the three MBTA Stations in the City of Medford

We have not commented on the visual quality of the two Power Stations because they are not located yet. Also, there may be screening elements that would improve the view of the Catenary system, but there is not enough detail in the DEIR to make any recommendations about its screening yet. It will be important for the City of Medford to review and comment on this missing information as it is developed. Is this possible?

Also, the DEIR talks about irrigation for the new plantings at the Station.

- We suggest that the plants be hardy natives that will not need irrigation in the long run. We also suggest that the T include a watering requirement in the planting specifications for all new station plantings for the first two summers after the plantings are installed instead of irrigation. Is this possible?

Ball Square Station

The Ball Square Station will be located in a very dense, heavily populated area, which is industrial and commercial. It would be hoped that with a well-designed T station, the Green Line Extension would actually improve the visual quality of the area. The increased foot traffic to and from the station may bring people to the small businesses in the area.

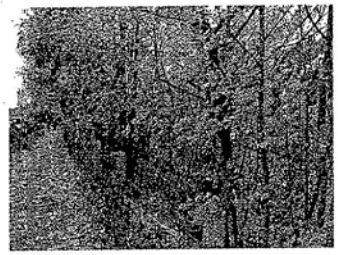


Ball Square area at present

The increased bike commuter use must be carefully planned for to make sure that the bike parking is adequate.

College Avenue Station/Tufts University

Like the Harvard T Station, the future College Avenue T Station will be the Tufts University station. The Station's architecture should blend into the surrounding University character, especially Professors Row, and the brick buildings, such as Robertson Hall, that surround that station location. The current visual character presently is pleasant because of the well kept university buildings, the historic wrought iron gates and fence, the large green lawn, and the treed buffer along College Avenue.



treed buffer that will be partially removed



Future station view

The advent of the Station will greatly enhance the area, but again the possible increase of bicycle commuters and vehicular commuters needs to be well planned for during the final design. Because the intersection of College Avenue and Boston Avenue is wide, there will be a temptation for outlying commuters to see that Station as an excellent place to drop off commuters and, again, to park in adjacent neighborhoods. Increased vehicular traffic would affect the visual quality of this area in a negative way. Because of the potential of increased vehicular traffic, it makes sense that the final designers need to rework the intersection to keep traffic moving through the intersection and to widen the pedestrian landing space at the top of the Station along Boston Avenue and in front of the Tufts Engineering Building.

From the DEIR, it is apparent that a part of the treed buffer along College Avenue may be removed. It is imperative that the T work with the City of Medford and Tufts University to make sure that the Tufts edge of the corridor as pleasant and as green an edge as possible during the final design phase of work.

Mystic Valley T Station

When the Green Line extension comes to the Mystic Valley Parkway, the Station's visual quality will need to add to, not destroy, the business renaissance in that area.

This part of Medford has turned from being a rundown industrial area to a thriving business area. It is also adjacent to a well-kept two family neighborhood.

When reviewing the plans for the Station, we see that there is a missed opportunity in the present siting of the Station. At present, the plan will eliminate some of the thriving businesses and will discharge large number of people right at the edge of the neighborhood. Why couldn't the primary access to the Station be through the other side of the tracks where the Whole Foods grocery store and the liquor store are located? There is already a large parking lot there and, more importantly a well-designed access point for vehicular traffic, which is off the Parkway, Route 16.



Possible entry to T behind white car



Entry off Route 16



Parking at Whole Foods

Again, this Station will have the same problem of a potential increase of vehicular traffic as the other two Medford Stations, but it is a far greater problem here because the station's location is also opening up ridership for people in West Medford and East Arlington. Again, increased vehicular traffic will have a negative visual affect on this area. The DCR's new Greenway in Arlington and Somerville will be

terminating only a block from the new station location, and will bring many walking and biking commuters to the Station.

The potential for vehicular drop off at this Station is the greatest of the three Medford stations. Because the T has opted not to provide parking at the Station, it is paramount that the T work to keep the commuting cars out of the residential neighborhood during the final design phase of work. Also, because there is already a large parking lot on the other side of the tracks, many commuters will think that they can park in that lot free of charge and then walk to the Station. It is good that the T has included a drop off area at this Station because there will obviously be a need for it. Unfortunately, the drop off area may require the removal of some of the largest trees in that whole project. Again, the T will need to replace them caliper inch per caliper inch with new tree plantings at this Station and elsewhere in Medford.

Increased bicycle traffic will also need to be accommodated and carefully designed. Until the two new bike cages were installed at the Alewife Station this past year, that Station had every railing festooned with bikes of all ages and conditions. This situation is bound to occur at the Mystic Valley Station as well unless there is room for two similarly scaled bike cages there too. At present, the Station schematic design has not devoted enough space for the bicycle traffic that will occur there.

The architecture of the Station will need to reflect well on the adjacent Mystic Valley parklands that are a beloved, regional, passive recreational facility. The materials of the Station Design need to be compatible with its context of a landscape of beautiful mature trees, expansive lawns and the Mystic River. The new stations at Wood Island Station and Airport Station in East Boston are good examples of stations that could be emulated.

Johnson, Holly (EEA)

From: stephanie [stephani.burke@comcast.net]
Sent: Wednesday, January 06, 2010 12:45 PM
To: Johnson, Holly S (ENV)
Subject: green line.pdf - Adobe Reader
Attachments: green line.pdf

Hi Holly,
I would like to submit the attached comment letter in regards to the DEIR Project No 13886.
Regards,
Stephanie Muccini Burke,
Medford City Councillor

City of Medford
Stephanie Muccini Burke,CPA
City Councillor
5 Headland Way
Medford, MA 02155

January 6, 2010

Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02114

Re: Green Line Extension Project
Cambridge/Somerville/Medford
Draft Environmental Impact Report (DEIR)
Project No 13886

Dear Secretary Bowles:

Please accept this comment letter on the DEIR prepared for the Green Line Extension Project. I have attended several public meetings on the Green Line Extension and chaired a public meeting when I was the Council President. Throughout this time period, I heard from the citizenry of what a unique opportunity we have! I agree with this philosophy and because of this, expect the project to be the best that it can be and serve not only the residents of Medford-Hillside, but far beyond this area.

While the DEIR is an extremely comprehensive document, I would like to address fundamental issues that I believe have been neglected or not adequately addressed in the document. In particular, is the issue of commenting on the College Ave Terminus vs. the Rt 16 Terminus. Likewise, the health issues that exist due to the proximity of the commuter rail line to residents' homes and further exacerbated by moving these tracks even closer to these homes with no mitigation.

L-007-001 **Medford Hillside**-For those of us who reside in Medford, we consider Medford-Hillside to include the area along Boston Avenue to Mystic River. I feel that in order to achieve the goals set forth in the SIP and the commitment from the Central Artery/Tunnel Project, the full scope of the project should be to Route 16 and should not be broken into a "Proposed Project" and a "Future Full Build" project. However, due to the format in the DEIR, it appears that one should comment on both potential terminuses.

L-007-002 **Terminus-College Avenue**—I do not support the terminus being as College Avenue due to the impact on that abutting neighborhood. I do not feel that enough consideration has been given to this terminus. For example, the added noise and vibration from this being the end of line. The track will reach well beyond College Ave and have a direct negative impact on residents west of College Ave. I support the terminus being at Route 16 for this reason. Further, should the terminus be College Ave., sufficient mitigation has not been provided for the portion of the commuter rail line (west of College Ave) that has been shifted northerly and closer to residents' homes.

L-007-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

L-007-002

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

L-007-003

Terminus-Route 16—On page ES-15 of the Executive Summary, reference is made in paragraph 1 that the "Future Full-Build Alternative could include parking at the terminal ...although none is currently proposed". During all public hearings, comments were made that there would not be a parking structure at this terminus (or College Ave). I strongly urge the Secretary to place a restriction on any parking structure as part of this project at this location.

L-007-004

Included in the DEIR is the prospect of land takings in order to complete the "Future Full Build Alternative". The DEIR makes reference to the loss to Medford of $205,935 in 1988 real estate taxes. This was corrected in a hand out that lists the tax loss in Medford at $15,777(Nov 9, 2009 Correction). Based on information from Medford's Assessor, Ed O'Neill, the tax losses in 2009 alone on one parcel in question, 200 Boston Ave would be $264,000. We urge the Secretary to obtain detailed information from City of Medford re: potential tax loss. Further, the executive summary on page ES-33 states "many of the jobs displaced would likely be relocated or replaced within the affected cities". This statement is clearly an opinion with no factual date to back it up. Additionally, the Commonwealth of Mass. recently worked with Italian Company, BioCell to build its corporate headquarter here in Medford at 200 Boston Avenue. We urge the Secretary to mandate that other scenarios be created that do not create a negative tax impact to the City nor displace these competitive companies. At a public meeting, DOT representatives made comment that this was the worst case scenario presented in the DEIR. As this is part of the written report, I felt the need to comment on this scenario.

L-007-005

Air Quality—As mentioned earlier, the intent of this project is to increase air quality! While overall, removing cars from the roads achieves this goal in totality, it seems unfair to subject abutters to poorer air quality after completion of the project than they had before. Further, it appears short sighted not to address the negative impact that the Commuter Rail has on this neighborhood with the disbursal of diesel particulates currently. This maybe further exacerbated by the moving of the rails closer to homes upon project completion. Many of these homes are at the same elevation as the tracks. The Secretary has an opportunity and duty to address this in the FEIR!

L-007-006

Tree Lined Buffer—Many of the residential homes along the current commuter rail line enjoy a buffer provided by trees. I urge the Secretary to take into consideration the visual impact of the project and means to mediate any loss of trees from the project.

In summary, I would like to request that the FEIR examine the Proposed Full Build in the same detail as required by the Secretary's Certificate. That the Terminus at Route 16 be prepared using the best case scenario not worst. That weight be given to the abutters and ensuring a better quality of life than they presently have. That the voice of the disabled be heard! That the Green Line Extension be the best it can be and not shortsighted by carving the project into two phases whereby negatively impacting the quality of life on abutters for a longer period of time.

Respectfully submitted,

Stephanie Muccini Burke, CPA

Medford City Councillor

L-007-003

The proposed station at Mystic Valley Parkway/Route 16, as presented in the "Preferred Alternative," includes neither a parking structure or lot. Similarly, the terminus station at College Avenue, for the Proposed Project, includes no station parking.

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-007-004

DEIR/EA Section 5.3 describes the Project's potential acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts.

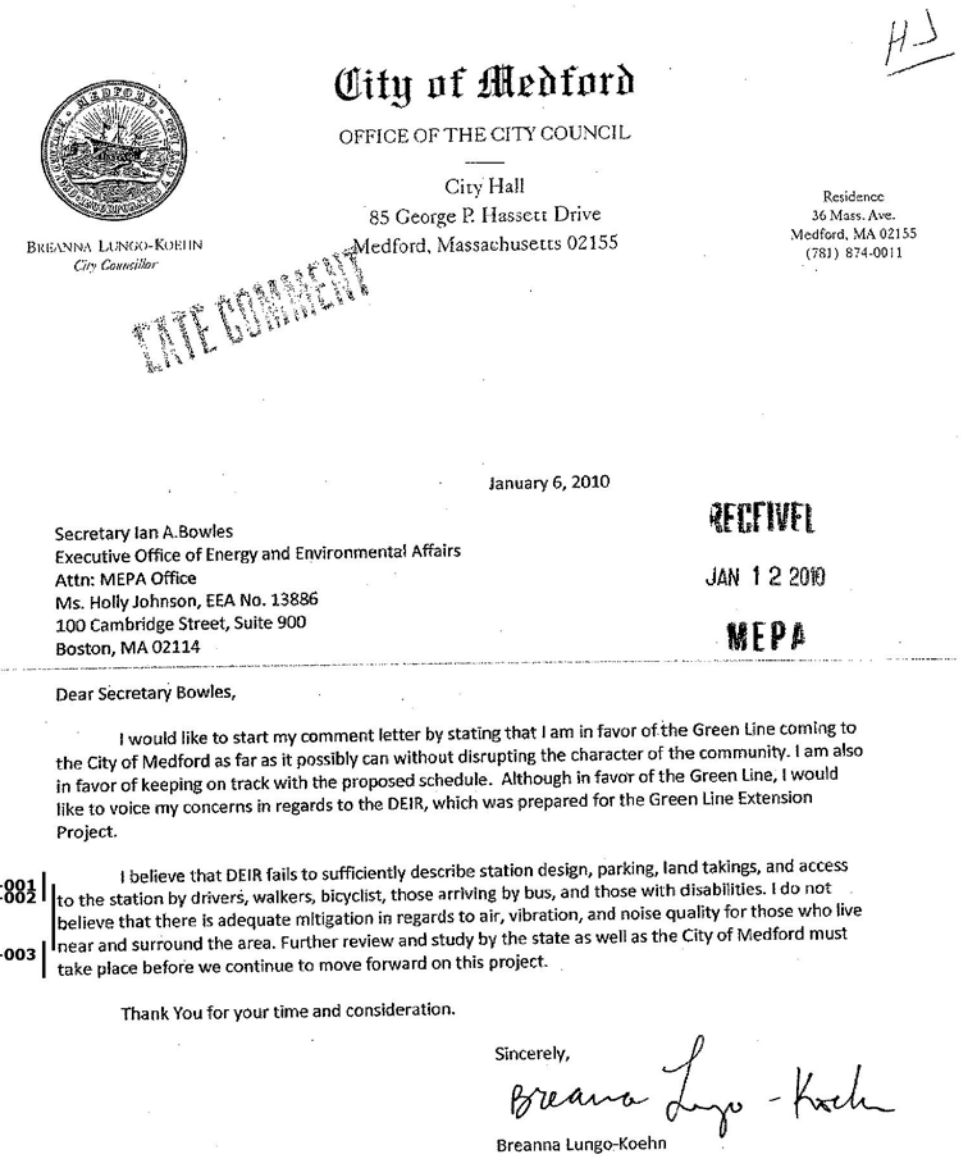
Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

L-007-005

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary’s Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

L-007-006

As the Project advances into preliminary engineering, efforts will be made to minimize the removal of trees where necessary. Also, opportunities to replace impacted landscaping outside of the MBTA's right-of-way will be considered.



City of Medford

OFFICE OF THE CITY COUNCIL

City Hall
85 George P. Hassett Drive
Medford, Massachusetts 02155

BREANNA LUNGO-KOEHN
City Councillor

Residence
36 Mass. Ave.
Medford, MA 02155
(781) 874-0011

LATE COMMENT

HJ

January 6, 2010

RECEIVED
JAN 12 2010
MEPA

Secretary Ian A.Bowles
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
Ms. Holly Johnson, EEA No. 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I would like to start my comment letter by stating that I am in favor of the Green Line coming to the City of Medford as far as it possibly can without disrupting the character of the community. I am also in favor of keeping on track with the proposed schedule. Although in favor of the Green Line, I would like to voice my concerns in regards to the DEIR, which was prepared for the Green Line Extension Project.

L-008-001
L-008-002
L-008-003

I believe that DEIR fails to sufficiently describe station design, parking, land takings, and access to the station by drivers, walkers, bicyclist, those arriving by bus, and those with disabilities. I do not believe that there is adequate mitigation in regards to air, vibration, and noise quality for those who live near and surround the area. Further review and study by the state as well as the City of Medford must take place before we continue to move forward on this project.

Thank You for your time and consideration.

Sincerely,

Breanna Lungo-Koehn

Breanna Lungo-Koehn

L-008-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-008-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

L-008-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

City of Medford

OFFICE OF THE CITY COUNCIL

City Hall
85 George P. Hassett Drive
Medford, Massachusetts 02155

FREDERICK DELLO RUSSO, JR.
City Councillor

Residence
357 Main Street
Medford, MA 02155
(781) 395-2287

4 January 2010

RECEIVED
JAN 8 2010
MEPA

Mr. Ian Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA # 13886
100 Cambridge St. Suit 900
Boston, MA 02114

Dear Secretary Bowles,

Thank you for the opportunity for me to respond to the Green Line Extension Project DEIR. I write as a City Councillor, EOT Advisory Committee Member, and as a residential and business abutter. Throughout my participation in this process I have remained open to the various proposals and processes of the project. I have also encouraged open participation and mutual respect among citizens and interested parties in an effort to make this project the best it can be for Medford and to keep the project focused on its goal to improve air quality in the region and thus improve the citizens' quality of life. Although the responses from the Mayor of Medford and various department heads will be more detailed and technical, I do offer my own comments and observations and will limit them primarily to the part of the project which effects Medford. I also express my gratitude to those who have worked so hard to create the DEIR and to those who exercise the management the project.

While lengthy and pregnant with information, the DEIR does not provide enough detail about the impact of the proposed project, especially the degree of land taking in the second phase of building which would bring the line to the Mystic Valley Parkway. It is also deficient in offering mitigation measures to the direct abutters, does not offer a clear enough picture of socio-economic impacts and seems to minimize unrealistically traffic and parking impacts throughout the entire scope of the project.

L-009-001 The announcement of a two-phased build, phase one to College Ave. and phase two to the Mystic Valley Parkway, presents concerns and additional anxiety that still need to be addressed. Will the College Ave. Station be built as a terminus and then be abandoned as such? When will construction to the Parkway portion commence and when will additional design details be made available for public comment. The current plans to the Parkway will create additional land taking, loss of tax revenue and employment and present the most encroachment onto abutter's property. The traffic and parking studies need greater detail and mitigation plans need greater clarity and citizen input before the second phase of the project can proceed. A public parking facility at the terminus would not be advisable.

L-009-002

L-009-003 While levels of noise and vibration have been measured and mitigation efforts have been proposed, the mitigation efforts seem deficient. Those who live in the vicinity of College Ave. will bear the burden of the noise generated at the terminus. The delicate nature of some of the science facilities at Tufts University was given special attention. I am particularly concerned about the proximity of the homes and the need for domestic tranquility for all direct abutters and for the children who attend St. Clement Grammar and High Schools, many of whom come from struggling socio-economic backgrounds. St. Clement Parish is active throughout the day with many events and liturgical celebrations. Sensitivity for the many celebrations and solemn occasions marked in the church must be made a priority during the construction. For all immediate abutters, a promise of clear mitigation and protective measures is needed and must include structural inspections, soundproof windows and a promise for an unambiguous system to seek compensation for damages long after the construction has ended.

L-009-004 Medford is a community which has, throughout her history, enjoyed change and growth while at the same time preserved stability and a sense of continuity. To what degree will this project gentrify the adjacent areas, encourage transience and what impact will this have on the existing population? This topic needs further examination *vis-à-vis* economic justice, tax impact and social justice.

L-009-005 Access to stations needs further detailed study. Will these areas have sufficient ADA compliance for the population served? What will the impact of drop-off and pick-up traffic be? Will the needs of pedestrians and those traveling by bicycle be met? Today, the traffic and parking situation in the City of Medford is a source of community concern in need of solution. Yet, the City lacks the necessary means to deal with the problem. The project will undoubtedly amplify and add to parking and traffic problems. Mitigation measures will need funding to provide sufficient resources for the city to settle the traffic problems.

L-009-006

L-009-007 A process is necessary to create a construction management program that will welcome community input before the project commences. Such a process will need to avert any possibility of creating movement paralysis in the region. Diverted traffic will exaggerate problems on the project's periphery.

L-009-001

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch.

L-009-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A schedule for evaluating this segment has not been developed.

L-009-003

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

L-009-004

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic

My remarks, Mr. Secretary, are not exhaustive nor are they full of good cheer. They are, taken in combination with the comments of other local officials, citizens and invested parties, an outline of items meant to be addressed before the project can take more active steps. I again point out that before phase two can proceed, an additional review process must be undertaken. I look forward to working with you and all the project collaborators to make this process a model for what is right about public transportation.

Sincerely yours,

Frederick N. Dello Russo, Jr.
Councillor

effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis.

L-009-005

The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement as the station designs are refined.

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-009-006

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

L-009-007

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

City of Medford

BOARD OF HEALTH

City Hall - Room 311
85 George P Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2560
FAX: (781) 393-2562
TDD: (781) 393-2516

KAREN L. ROSE, RN,c,BA,MS
Director

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA number # 13886
100 Cambridge Street, Suite 900
Boston, MA. 02114

Katherine Fichter
Executive Office of Transportation
10 Park Plaza, Room 4150
Boston, MA. 02116

December 30, 2009

Dear Secretary Bowles,

The Medford Board of Health has reviewed the Draft Environmental Impact Report/Environmental Assessment and Section 4(f) Statement for the Greenline Extension Project EEA #13886. Areas reviewed include, but are not limited to Noise, Vibration, Air Quality, Construction Mitigation (Noise/Pest/Dust control), Transport of Solids/Trash, and a Long Term Maintenance Plan for the Extension.

L-010-001
L-010-002

Shifting of the existing commuter rail tracks up to 18 feet toward the existing properties and homes to as little as 10 feet from the property line, will increase noise, vibration and the health effects of diesel particulates, a known carcinogen. Though it is a documented change, it appears that additional health assessment information would be necessary to plan appropriate remediation.

Air Quality

L-010-003

Though Air Quality Modeling methodology is an accepted evaluation tool, it appears to be lacking in information specific to the air quality in Medford between Ball Square and Mystic Valley Parkway. It would be useful to have more health assessment, in particular to the moving of the commuter rail closer to the homes with the impact of diesel particulate in closer proximity. "There is limited information on exposure to just diesel particulate matter but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes acute and chronic health effects." "Acute exposure to diesel exhaust may cause irritation to the eyes, nose, throat and lungs, some neurological effects such as lightheadedness. Acute exposure may also elicit a cough or nausea as well as exacerbate asthma. Chronic exposure in experimental animal inhalation studies have shown a range of dose dependent lung inflammation and cellular changes in the

L-010-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

L-010-002

The preparation of a health study is beyond the scope of the Green Line Extension Project. However, the Project will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality.

L-010-003

The Green Line Extension will have a positive impact on outdoor air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency. The DEIR/EA conducted an air quality analysis evaluating the relocation of the commuter rail tracks, which demonstrated no substantial change in air quality. In addition, new fuel standards from EPA will result in lower particulate matter emissions from locomotives, automobiles and buses.

lung, and there are also diesel exhaust immunological effects. Based upon human and laboratory studies, there is considerable evidence that diesel exhaust is a likely carcinogen."[1] Due to this knowledge and the closer proximity to homes, it would be most advantageous if the commuter line trains could be upgraded to a more environmentally aware technology. It was stated in the report that there is a "slight increase" in the diesel particulate exposure, where the tracks are closer to homes. Mitigation must include a requirement that there be no worsening of conditions, no matter how small, and an effort to maximize mitigation to improve the quality of life for residents living along the tracks.

L-010-004

The Transportation Reform Act signed by Governor Patrick on June 26, 2009 requires the Massachusetts Department of Public Health (MDPH) to study the health effects of exposure to fine and ultrafine particulate air pollution upon populations located close to the sources of such pollution. It is clear that long term effects have known outcomes, especially for those at risk. Consideration should be given to have MDPH study this area to ascertain inclusion of any findings in the remediation plan for the Greenline Extension.

L-010-005

The project states that there is a possibility of eliminating freight service from the rail lines. Movement of the freight to the roadways negates air quality improvements proposed in this project by adding Vehicle Miles traveled, VOC's and CO, as well as adding to the burdens on the already heavily traveled streets of Medford.

L-010-006

Wherever possible, review of bus routes should be considered for opportunities to shift to the Greenline, for additional air quality benefits, as well as removing bus exhaust in slow and congested traffic on Boston Avenue.

L-010-007

Reference to Exposure Levels and Health Effects from Air Toxics in section 5.6.6 states that "even if emission levels and concentrations of MSAT's could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude meaningful conclusions about project specific health impacts", causes concern for this public health department. Reference to national MSAT's does not take into consideration differences in climate, ambient conditions, urban impacts and population effects. Other health assessments should be added to this report to better inform decision makers and the public about the health effects.

L-010-008

Additional data is noted on the Fay, Spofford and Thorndike peer review including the attached memorandum from KM Chng Environmental Inc.

Stations

Station design in Medford has immediate public health and safety concerns for this department. Access to College Avenue off of the bridge, at an intersection with high traffic and pedestrian accidents appears to be a health and safety risk for pedestrians and motorists. This intersection has a high volume in the commuter rush hours in the morning and evening. It is a five point intersection, which in itself is a challenge for motorists and pedestrians to navigate. Recent

L-010-009

[1] Air Toxics in New England, EPA, http://www.epa.gov/eco/airtox/diesel.html, last updated June 24, 2009

L-010-004

It is anticipated that the Green Line Extension will have a positive impact on outdoor air quality within the study area. The modifications to commuter rail train engines is outside the scope of this project. However, new fuel standards from EPA will result in lower emissions from locomotives, automobiles, and buses.

L-010-005

The preparation of a health study is beyond the scope of the Green Line Extension Project. However, the Project will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality.

L-010-006

The Green Line Extension may impact some freight railroad access routes. However, alternate freight rail corridors are available to serve area clients.

L-010-007

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-010-009

improvements have made the area somewhat safer, but the station will add another facet for navigation issues. Re-design should be considered to remove the access off of the bridge, which is barely enough for pedestrians and two lanes of traffic.

L-010-010

The same health and safety issue for pedestrians and motorists comes from the location on Boston Avenue, for entrance and exit on Boston Avenue for the Mystic Valley Parkway station. This is a highly congested area, where even now entrance and exit of existing businesses is difficult during commuter hours. Redesign and reconfiguration of this location must be considered and the logical move is to the Parkway location of Whole Foods, where there are existing large entrances and exits to the roadway. In addition, Whole Foods could be included in a multi-use building to prevent the loss of this business.

L-010-011

A long term station maintenance plan for upkeep of bathroom facilities and trash maintenance will need to be submitted to the Medford Board of Health with contacts for corrective actions.

L-010-012

The indoor air quality plan which talks about the provision of outdoor air ventilation to improve indoor air quality via "ventilation system monitoring to help sustain station occupant comfort will reduce indoor air contaminants that are odorous, irritating or harmful to station occupants", does not address the effects of this ventilation on outdoor air quality for the inhabitants of these locations. Further information must be made available for review and comment.

Noise/Vibration

L-010-013

This reviewer believes that there is inadequate testing for Noise and Vibration in Medford's portion of the Greenline. Only 3 noise meters, 2 vibration and 1 combo unit were used for assessment. Additional noise and vibration impacts must be considered due to the proximity to homes, elderly housing, schools and businesses.

If a 10 dB increase equals a doubling of perceived loudness, which can effectively be met with a change in volume of a human voice, it is clear that this is truly a public health issue. Health effects analysis can associate changes in motor vehicle traffic volumes with health-related outcomes such as injuries, sleep disturbance, noise-related stress, diabetes, respiratory disease, and social cohesion. The report states that, "Since existing noise levels are relatively high at locations along the existing commuter rail line, even small increases in future noise levels are considered to have the potential for moderate to severe noise impact." Therefore, Noise barriers need to be installed throughout the entire Medford line due to the proximity to homes, Tufts dorms, elderly housing, and schools.

Noise barriers installed should be high enough to remediate any noise impact, but would assist in the Visual impact of the installed catenary lines. Illustrations, specific locations and height projections should be provided for review as soon as possible for further comment.

Existing noise conditions list the commuter train noise level as 88 – 99 dBA in Medford, at distances of 50 – 60 feet. The plans bring the commuter line to within 10 feet of the property line of some homes. Additional data for noise mitigation needs to be provided and should be emulated at such distances to ensure proper measures can be taken with the construction. In the

L-010-008

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

L-010-009

The long term mitigation proposed at this intersection is expected to improve pedestrian and vehicular traffic operations. FEIR Chapter 4, College Avenue, provides more detail.

L-010-010

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-010-011

MBTA, future operator of the Green Line Extension, will be responsible for all aspects of station and rail facilities maintenance.
Detailed maintenance plans will be addressed in later phases of the Project.

L-010-013 same section of the report,, a narrative states there were measurements listed in Table 4.8-1 for additional measurements taken in the College Ave. to Mystic Valley Parkway area. Only measurements at Burget Avenue and Orchard St. were completed at 71 Ldn, with a commuter train max. of 88-89. Additional sites should have measurements, as this stretch has dense residential areas with two and three family homes. This information is not adequate for a public health review. An pre-project assessment should be provided for all abutters of the project to document existing conditions of the homes/businesses foundations, walls and windows to make mitigation with insurers less complex during and after the project.

All noise and vibration control measures need to be implemented to mitigate noise and vibration impacts from train operations. More specific site plans are needed for evaluation and review.

L-010-014 It is a general feeling in Medford that the Route 16/Mystic Valley Parkway station needs to be reconfigured. To that end, vibration studies for 200 Boston Ave need to be included, as that is generally inhabited by Research and Development companies.

Homes on Morton, Granville and Winchester Pl. are within 15 – 19 feet from the future commuter line. Disruption of normal home environments, impeded sleep and wellness must be included in the studies of noise and vibration and installation of noise barriers and insulation measures on homes such as these must both be used to protect the health and wellness of the residents.

L-010-015 Consideration of tunneling from at least College Avenue to Mystic Valley Parkway should be reconsidered as a measure to control the effects of lessening the distance to homes in the area, where long term effects of these health indicators are most likely to effect the health and wellness of the neighborhood population.

L-010-016 Long term maintenance plans must be committed to the project, as current public nuisance complaints have been ignored by the MBTA, in particular the Wellington station location abutting residential properties. Residents are often answered by MBTA employees with curt and disregarding comments, including "the trains were there before the homes". When we are advocating for SMART building and transportation projects, this comment is not acceptable. Public Health needs a plan that can be guaranteed.

Additional data is noted on the Fay, Spofford and Thorndike peer review including the attached memorandum from KM Chng Environmental Inc.

Demolition/Construction/Hazardous Materials

L-010-017 Additional information is needed for demolition and construction remediation planning. Specific plans for noise control, dust/particulate matter control, trash disposal and health measures for demolition including lead and asbestos contamination, and unidentified hazardous waste is required to adequately comment from a public health perspective.

Medford has a robust set of regulations for demolition and construction including preventive baiting for pests, pest contracts including pre-demolition to post-construction have provided

L-010-012

The Green Line Extension will have a positive impact on outdoor air quality within the study area. Indoor air quality is unique to each individual building, and is outside the scope of this project.

L-010-013

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. During preliminary engineering, MassDOT will conduct further analysis for several individual properties. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts.

L-010-014

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-010-017

Medford with fewer pest issues over the past years. Observance of these measures in Medford are needed by this project. Asbestos DEP notification copies should be submitted to the Medford Board of Health. Any unknown Hazardous waste findings should be reported to the Medford Board of Health when Massachusetts Department of Environmental Protection is notified. A more complete and detailed plan for Hazardous materials is needed for review by this department, as it is mentioned in the EIR, it is not detailed. Measures to protect the public health and safety will be agreed upon at the time of construction once the site specific Health & Safety plan is written and reviewed by this Board of Health.

L-010-018

Water treatment for dust control in the summer months is often not adequate to mitigate health effects. Calcium Chloride applied to surfaces has been a measure used by construction crews with good results. Expanded plans should include this measure. Tarps should be used to cover stockpiled soils to prevent the spread of dust in windy conditions, not just water application.

Control of particulate matter has been discussed, regarding construction equipment retrofitting, maintenance of all motor vehicles, machinery and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory required emissions control devices. It also proposes to limit idling vehicles. Additional information is needed for public health to adequately address this concern.

Noise remediation is an important concern in the long term, but construction mitigation measures must be applied in a preventive plan to decrease health/wellness effects to the citizens in these neighborhoods. Areas which require pile driving should have robust plans to protect the public health, as well as heavy construction equipment impact on noise. The 10 decibel level, which doubles perceived sound, could easily be multiplied. Avoidance of night construction is imperative for areas where property lines close in on residences. The community requires adequate rest and stress relief during construction to maintain their health.

The effects on the Saint Clements schools must be studied in more detail, due to the impact of construction focused on day time hours to protect the health of inhabitants in the neighborhoods at the Harvard Street bridge. Additional information should be studied to limit the effects on students that will be studying within close proximity to the work.

Socioeconomic/Environmental Justice

L-010-019

Census 2000 does not adequately represent the City of Medford and it's citizens. When this Board of Health is preparing health assessment or statements for grants, it is the census of the schools that more appropriately identifies our community. In sharing this, it is clear that we have a higher immigrant population with non-English speaking families than represented in this report. A revision should be considered as it will most definitely affect citizens not identified previously.

L-010-020

Medford also has a very elderly population. 18% of our population is 65 years or older. It is not clear by the information presented that consideration of this population and the effects of this project to this at risk and isolated population has been sufficiently reviewed and considered. This project abuts an elderly housing project in Medford for which there is no specific mitigation

L-010-015

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

L-010-016

MBTA, future operator of the Green Line Extension, will be responsible for all aspects of station and rail facilities maintenance. Detailed rail transit operations and maintenance will be addressed in later phases of the Project.

L-010-017

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

L-010-018

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP),

L-010-020

plan. A letter from the Medford Council on Aging Board of Director's to Mayor Michael J. McGlynn, dated November 20, 2009, confirms the general feeling that not enough accommodation was given to the large senior citizen population in Medford. (Attached)

Throughout the project, meetings with affected residents should occur, at a minimum quarterly, to assist in additional needs and disturbances not anticipated by the project. The Medford Board of Health would assist in hosting and facilitating these meetings with construction contractors and principles of this project.

Additional Permits

L-010-021

The City of Medford Board of Health requires permits for Rubbish Haulers, dumpsters and temporary septic (portable toilets). Applications can be made in the Board of Health office.

Closing Remarks

While the project is supported, the EIR is missing integral information for evaluation and review. While the overall project is to improve air quality, it appears that other measures can be made to make the cost and effort a more substantial gain. It is imperative that special consideration be given to the residents who will bear great disruption during construction despite the efforts of the mitigation and they will need a voice and response to any ongoing concerns.

Thank you for the opportunity to comment on the Draft Environmental Impact Report and we look forward to an open and honest working relationship with the principles of the Greenline Extension project.

Sincerely,

Karen L. Rose, RN, BC, BA, MS
City of Medford
Director of Public Health/Director of Elder Affairs

5

Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction. More detail on dust control equipment, noise remediation, and other construction elements will be developed during preliminary engineering.

L-010-019

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

L-010-020

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-010-021

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

City of Medford

Council on Aging

Medford Senior Citizens
Multi-Service Drop-In Center
101 Riverside Avenue
Medford, MA 02155

Telephones:
(781)396-6010
Fax (781) 395-8912
Drop-In Center
(781) 396-0377
City Hall T.D.D.
(781) 393-2516

Karen L. Rose, RN, BC, BA, MS
Director of Elder Affairs

Hon. Mayor Michael McGlynn
Medford City Hall
Medford, MA
RE: Green Line Extension Project

November 20, 2009

Dear Mayor McGlynn,

As the board of the Medford Council on Aging, we applaud the efforts of the Executive office of Transportation, the MBTA, and the impacted city leaders, to bring regular transportation access to Medford with the Green Line Extension.

We look forward to seeing our residents have access to Somerville, Cambridge and Boston by train. I'm sure businesses in Medford look forward to the increased access to Medford business for residents of Boston, Cambridge and Somerville.

There are a couple of issues that we would like to see addressed, as a city, before the project moves forward at full speed. It is our belief that the environmental impact study has not been reviewed enough by the citizens of Medford who will be affected most directly by the construction of the project. We feel that this, and many other concerns affecting our seniors especially at the Walking Court residences are not being addressed partly because (and we think this is a big part) there has been no plan to have a hearing in Medford to specifically address Medford issues.

We think it would be in the best interests for all concerned – citizens because they will be heard and feel included, and for the DOT/MBTA because they would earn more public "buy in" of their project, if a hearing were to be held in Medford - where residents here (especially those with no car to travel to meetings) could hear first hand the details and ask questions so they could air their concerns and get the answers they desire.

In summary, we would like to urge you to request another public hearing in Medford before the major project work begins. Thank you for hearing our concern.

Sincerely,

The Medford Council on Aging Board of Directors

Joan Farren, RN Chairperson

Arthur Rogers vice Chairperson

Priscilla Blakely

Gina Hughes, RN

Cornelius Murphy

Kate Collins

Rev. Dr. David Kilpatrick

Chris Grande

Cheryl White

Anna Ekpenyong

KM Chng Environmental Inc. **MEMORANDUM**

To: Ed Hollingshead (FST)

From: Tim Lavelle (KM Chng)

Subject: EOT Green Line Extension – EIR/EA
- Air Quality Review

Date: 4 December 2009

As requested, we have reviewed the document *Draft Environmental Impact Report/ Environmental Assessment and Section 4(f) Statement* for the Green Line Extension Project (EEA #13886). Our objective was to review the completeness, methodology, and data assumptions for the air quality analysis conducted for the Project.

SUMMARY

The document appears to be reasonably thorough and, for the most part, uses methodologies that are consistent with current EPA/DEP guidance. However, as discussed below, a number of issues with the analysis limit the verification of the accuracy of the results. Missing data and methodology details would need to be provided by the author to check the accuracy. However, the errors and inaccuracies described are not likely significant enough to change the overall conclusions presented in the Report, which states that the build alternatives would provide air quality benefits when compared to the No-Build Alternative.

The following brief summary points identify issues with the document's compliance with the Secretary's Certificate and also problems with missing or incomplete methodology details and data within the air quality sections of the Report. For more explanation of the summary points, this Summary section is followed by a section of Detailed Comments addressing each of the bulleted summary points.

Compliance With the Secretary's Certificate on the Expanded Environmental Notification Form

- The Certificate requires reporting of emission inventory results for CO and PM2.5, these results are not presented in the Report; and
- Quantitative PM10 and PM2.5 hotspot assessments that were not required in the Certificate were included in the analysis using methodology that is not currently endorsed by EPA or FHWA, and therefore the reported results may be misleading to the public.

Affected Environment – Section 4.7

- No description of PM10/PM2.5 persistence factors used to estimate 24-hour and annual results from the 1-hour modeled results is provided;
- Report does not provide description of modeling methodology for the Microscale Commuter Rail Evaluation; and
- The emissions inventory does not present results for CO or PM2.5.

Environmental Consequences – Section 5.6

- The 1-hour CO background concentration is suspect and the 8-hour CO background concentration is not presented;
- No description of the development of PM10/PM2.5 background concentrations is provided;
- The project-opening year, or construction completion year, is not included in the analysis; and
- As required in the Certificate, an attempt to provide a greenhouse gas emission inventory comparison between the alternatives is provided, however it is incomplete. Although greenhouse gas emissions are calculated for on-road motor vehicles, there is no accounting of greenhouse gas emissions for electricity generation to power the extended Green Line.

Air Quality Appendix

- The air quality study protocol is not provided in the Report Appendix for public review;
- It appears that the 8-hour CO concentration results were calculated incorrectly;
- It appears that there are multiple issues with the MOBILE motor vehicle emission factor modeling;
- There are issues with the background concentrations used in the CAL3QHC hotspot modeling for CO, PM10, and PM2.5; and
- There are data input issues with the emission factors used in the CAL3QHC hotspot modeling.

DETAILED COMMENTS

Compliance With the Secretary's Certificate on the Expanded Environmental Notification Form

L-010-022

- The air quality scope in the Secretary's Certificate requires that "the analyses should analyze the following emissions: VOC, NOx, greenhouse gases, carbon

L-010-022

Particulate Matter issues were raised during public participation meetings. As a result, it was deturmined that the DEIR/EA would evaluate Particulate Matter emissions. The emissions of carbon monoxide and particulate matter (PM10 and PM2.5) were evaluated as part of the microscale (hotspot) analysis. Particulate matter emissions were calculated as part of the microscale and mesoscale analyses to provide additional information.

The CAL3QHC is the one of the models recommended for calculating PM concentrations from roadways. In the user's guide (User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections), it states:

The CAL3QHC Version 2.0 model has been slightly revised. The revisions to the model are reflected in this version of the user's guide. The CAL3QHC Version 2.0 input structure has been converted from a "fixed format" to a "free format". Also, the CAL3QHC source code has been enhanced to permit the calculating of Particulate Matter (PM) concentrations. These revisions to CAL3QHC Version 2.0 will not change previous model results.

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

L-010-022

monoxide, particulate matter (PM) and air toxics." Although it appears that CO and PM2.5 emissions were estimated for each alternative as data files in the Air Quality Appendix indicate, the results for these two pollutants are not presented in the EIR.

- The scope requires that the microscale analysis examine localized hotspots for CO concentrations only. Because the study area is located in an attainment area for PM10 and PM2.5 (meaning that EPA recognizes this area as meeting the regulated ambient air quality standards for these pollutants), there are no requirements for including PM10/PM2.5 hotspots in the analysis, and even more so for not including a *quantitative* analysis. Even if PM10/PM2.5 hotspots were required, current Transportation Conformity guidance endorsed by FHWA and EPA calls for *qualitative* assessments only. The agencies are currently in the process of finalizing *quantitative* methodology for PM10 and PM2.5 hotspots in conjunction with the completion and distribution of the MOVES emission factor model, which is scheduled to be released by the end of 2009. Therefore, PM10/PM2.5 modeled concentrations may not be accurate. The results presented are potentially misleading, and should not be included in this Report. This comment also applies to the PM2.5 hotspot analysis conducted for the Microscale Commuter Rail Evaluation, which has further questionable issues described under the Affected Environment section below.

Affected Environment – Section 4.7

L-010-023

- The section describes persistence factors used and how they were developed for modeling 8-hour CO concentrations, however no explanation of persistence factors is provided for the 24-hour PM10 and PM2.5 concentrations or annual PM2.5 concentrations. The persistence factor is used to estimate pollutant concentrations for longer averaging time periods than the 1-hour concentrations predicted by the modeling.
- The Report provides no description of the modeling methodology or the model used in the analysis for the Microscale Commuter Rail Evaluation.
- As discussed previously, meeting compliance with the Secretary's Certificate requires that the existing conditions mesoscale analysis include estimates of PM2.5 and CO emissions, which are not presented in the Report.

Environmental Consequences – Section 5.6

L-010-024

- As in the Affected Environment section, no persistence factors are provided for the PM10/PM2.5 hotspot modeling, no description of methodology for the Commuter Rail Evaluation is provided, and the mesoscale analysis does not present CO or PM2.5 emission results.
- The NAAQS for lead was revised to 0.15 ug/m^3 in October 2008. Table 5.6-1, *National Ambient Air Quality Standards*, should be updated to reflect this revision. This edit has no effect on the analysis or results.
- EPA recommends using the maximum applicable concentration from the last 3 years of monitoring data as the background concentration for microscale modeling. It appears that background concentrations used in the analysis were

L-010-023

The PM persistence factors were obtained from EPA's *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised*. The 24-hour and annual persistence factors for particulate matter were obtained from EPA's modeling guidlines. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency. The microscale analysis for the commuter rail evaluation was conducted using EPA's CAL3QHC Version 2 model.

L-010-024

The PM persistence factors were obtained from EPA's *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised*.

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

The emission concentrations of the existing and design year conditions were substantially below the NAAQS. As a result, no interim years were evaluated. The 8-hour CO concentrations were calculated following EPA's *Guidelines for Modeling Carbon Monoxide from Roadway Intersections* dated November 1992. The PM persistence factors were

L-010-024

extracted from a report published in 2006. No 8-hour CO background concentration is presented in the Report.

- Although PM10 and PM2.5 background concentrations used in the hotspot analyses are presented, no description of how the concentrations were developed is provided. Also, it is unusual to see a 24-hour PM10 background concentration (23 ug/m^3) that is less than the 24-hour PM2.5 background concentration (29.7 ug/m^3), which, again, leaves the PM10/PM2.5 modeling suspect.
- Because of Federal and State-mandated emission controls, which reduce motor vehicle emission rates in future years, the project-opening year (or construction completion year) can often show higher emissions and concentrations than the project-design year. Therefore, the project-opening year is usually included in the air quality analysis for transit projects. The project-opening year for the Green Line Extension was not included in the analysis.
- Greenhouse gases are not a local or regional issue, but a global issue. Although greenhouse gas emissions were estimated for study-area on-road motor vehicle traffic, there is no accounting of emissions from power plants providing the electricity to power the Green Line Extension.

Air Quality Appendix

L-010-025

- The Certificate requires that a study protocol be developed for the Project. Although the Report text alludes to DEP consultation regarding development of the study protocol, the accepted protocol should be included in the Air Quality Appendix for public review.
- It appears that the 8-hour CO concentrations were calculated incorrectly. The analysis uses the 1-hour modeled concentration plus the background concentration multiplied by the persistence factor to calculate the 8-hour values, instead of applying the persistence factor to the 1-hour modeled concentrations and then adding in the 8-hour background concentration. Since no 8-hour CO background concentration is presented in the Report, the 8-hour CO concentration results could not be verified. Since PM10 and PM2.5 persistence factors are also not presented, the modeled microscale results for PM10 and PM2.5 could not be verified.
- Based on the review of the MOBILE emission factor model inputs, there appear to be multiple issues with the emission factor modeling for the 2007 and 2030 calendar years including: vehicle registration data, I/M program data, anti-tampering program data, diesel rebuild effects, diesel sales fractions, ambient temperatures, RVP values and diesel sulfur content. This means that emission factors developed for the project are not completely accurate according to the latest guidance from DEP.
- CAL3QHC CO files show a background ambient concentration of 5 ppm, not 3 ppm as presented in the Report.
- CAL3QHC PM10/PM2.5 files show all free flow links having 0.0 g/mi emission factors. This under-estimates the concentrations estimated for the PM10/PM2.5 microscale analyses. However, as noted previously, quantification of

obtained from EPA's *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised*. The CAL3QHC is the one of the models recommended for calculating PM concentrations from roadways. In the user's guide (User's Guide to CAL3QHC Version 2.0: *A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections*), it states: *The CAL3QHC Version 2.0 model has been slightly revised. The revisions to the model are reflected in this version of the user's guide. The CAL3QHC Version 2.0 input structure has been converted from a "fixed format" to a "free format". Also, the CAL3QHC source code has been enhanced to permit the calculating of Particulate Matter (PM) concentrations. These revisions to CAL3QHC Version 2.0 will not change previous model results."*

L-010-025

The 8-hour CO concentrations were calculated following EPA's *Guidelines for Modeling Carbon Monoxide from Roadway Intersections* dated November 1992.

Particulate Matter issues were raised during public participation meetings. As a result, it was determined that the DEIR/EA would evaluate Particulate Matter emissions. The emissions of carbon monoxide and particulate matter (PM10 and PM2.5) were evaluated as part of the microscale (hotspot) analysis. Particulate matter emissions were calculated as part of the microscale and mesoscale analyses to provide additional information. The CAL3QHC is the one of the models recommended for calculating PM concentrations from roadways. In the user's guide (*User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections*), it states: *The CAL3QHC Version 2.0 model has been slightly revised. The revisions to the model are reflected in this version of the user's guide. The CAL3QHC Version 2.0 input structure has been converted from a "fixed format" to a "free format". Also, the CAL3QHC*

L-010-025

PM10/PM2.5 hotspot concentrations is not endorsed by FHWA/EPA and this error just leads to further misinterpretation of the results presented in the Report.

- CAL3QHC PM10/PM2.5 files show a background ambient concentration of 5 ug/m^3, which does not match any of the background concentrations presented in the Report. Therefore, based on issues already discussed, and errors of this magnitude, all air quality modeling for this project is considered suspect.

Although there are obvious errors in parts of the analysis, the overall conclusions presented in the Report would not likely change if the errors were corrected.

source code has been enhanced to permit the calculating of Particulate Matter (PM) concentrations. These revisions to CAL3QHC Version 2.0 will not change previous model results."

The MOBILE emission factor files were provided by DEP and CTPS to be consistent with the current SIP modeling requirements.

The air quality analysis actually used a 1 hour CO background values as presented in the Appendix. As a result, the CO values, which all be substantially below the NAAQS are conservative because the Project could have used a background of 3, which would lower all the 1-hour CO values by 2.

The CAL3QHC output files show 0.0 for the free flow emission factors for PM because the actual values are smaller. However, the CAL3QHC used the real values for calculating PM concentrations.

KM Chng Environmental Inc. **MEMORANDUM**

To: Ed Hollingshead (FST)

From: Martin Brien (KM Chng)

Subject: EOT Green Line Extension - EA
- Noise and Vibration Preliminary Review

Date: 25 November 2009

As requested, we have reviewed the document *Draft Environmental Impact Report/ Environmental Assessment and Section 4(f) Statement* for the Green Line Extension Project (EEA #13886). Our objective was to review the completeness and methodology of those documents with regard to possible noise and vibration exposure to neighbors of the project, with particular concern for the portions of the project within Medford city limits.

SUMMARY

The Noise and Vibration Sections of the subject Environmental Assessment (EA) document contain a complete noise and vibration assessment report and methodology, similar to that which would be developed for an Environmental Impact Statement (EIS). The document appears to be reasonably thorough and utilizes methodologies that are consistent with current general practice, as defined in the Federal Transit Administration (FTA) guidance manual *Transit Noise and Vibration Impact Assessment* (Report FTA-VA-90-1003-06, May 2006). The document also complies with the Secretary's Certificate for Noise and Vibration, as stated in the EA.

However, we would like to point out several portions of the assessment which may be lacking in detail, or which may provide a less than adequate and balanced perspective to the possible noise and vibration exposure to residents that live close to the proposed project. The following presents a summary of our concerns. The summary is followed by a detailed account with references to the EA document providing specific reasons for the concerns.

Environmental Consequences – Noise (Section 5.7)

L-010-026
- The summary statements imply that there will be no noise impacts with mitigation; however, several mitigation options may not work for practical reasons resulting in higher levels of impact than the report indicates. The report should address these conditions and the consequential reduction in impact mitigation.

L-010-027
- Construction noise impacts are not adequately analyzed such as effects from required nighttime construction and other operations that are likely to be very disruptive. The report should analyze in detail the types of equipment to be used and the time and frequency of operation and the likely impact from construction operations.

L-010-028
- The report lacks detail to determine impact levels and likely forms of mitigation at individual buildings, and how well the mitigation is expected to perform. The report should include a list of all impacted buildings, the type of mitigation, and whether the mitigation in practice is capable of reducing noise levels sufficiently.

L-010-029
- Noise source reference details for MBTA trains, equipment and maintenance yard activities is not complete and therefore it is not clear if the assessment is adequate. The report should include an appendix that lists all noise sources including the expected variation in the assumed noise levels.

L-010-030
- The methodology used to determine receptor locations and allocation of measurement data to establish impact criteria is not provided. It is possible that more measurements should have been conducted in areas of Medford other than near Tufts University buildings.

Environmental Consequences – Vibration (5.8)

L-010-031
- The performance of the proposed vibration mitigation options (ballast mats and resilient fasteners) is not sufficiently referenced and the stated performance levels (10 to 15 VdB for ballast mats) may be greater than what can be practically achieved. This may result in higher vibration levels to nearby residents than proposed. The report should either be more realistic about mitigation, or provide references of actual post installation tests, not conducted by manufacturers, to substantiate claims.

L-010-032
- The number of vibration impacts and vibration levels in the section between Medford Hillside and Mystic Valley Parkway seems proportionally less than other sections of the project. Also, no ground propagation tests were performed in areas to the north and south of the Tufts University ground propagation measurement site. Either more tests and analysis should be performed, or at least an explanation for the inconsistent data should be provided.

L-010-033
- The listing of vibration impacts does not include detailed information for each receptor making it difficult to determine the level of vibration to be expected at each building location. The document should include a list of all affected buildings, including predicted levels and mitigation details

L-010-026

Noise barriers proposed for the Project are considered to be feasible, reasonable and effective mitigation measures. Noise barriers have been used to mitigate potential noise impact for numerous transit lines across the United States and internationally. Sound insulation mitigation is being considered for some receptors where noise barriers may not be feasible or effective. As presented in the DEIR/EA, sound insulation has not been frequently used for rail projects, but it has been widely applied around airports to improve outdoor-to-indoor noise reduction and is considered to be an effective mitigation measure where it is implemented.

L-010-027

Construction impacts of the Project are described in each environmental resource section in the DEIR/EA Chapter 5, Environmental Consequences. Construction contractors will be required to comply with relevant federal, state and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project, design and construction.

L-010-028

The DEIR/EA reports noise levels for clusters of receptors which have similar noise environments. In accordance with FTA methodology, residential neighborhoods and relatively large outdoor noise-sensitive areas are typically clustered, simplifying the analysis that is required without compromising the accuracy of the analysis. More detail on clustering of receptors can be found in DEIR/EA Section 6.1.3 and Appendix C of the FTA guidance manual.

Existing Environment – Noise (4.8)

L-010-034
- The background discussion for noise may under emphasize the meaning of the measurement scale (dB) as it relates to human annoyance. For the reader who is not familiar with noise measurements, the quantitative results of the assesement may render the predicted noise level increases as less of an annoyance than will actually be experienced.

L-010-035
- The assessment relies on estimations of 24-hour Ldn from a one-hour noise measurement. This technique could lead to inaccurate characterization of the existing noise level that, in turn, can lead to inaccurate predictions. The report should have included more 24-hour measurements at more location, especially in parts of Medford other than where Tufts University is located.

Existing Environment - Vibration (4.9)

L-010-036
- Train vibration measurements were only performed at one location near the Tufts University sports fields and appear to have neglected the residential portions of Medford to the north and south of this area. Additionally, the vibration data shown in the report does not indicate the variation between different MBTA trains, which can be 15 VdB or more. This could lead to inaccurate predictions, or predicted levels that are less than the levels that may actually occur.

L-010-037
- The assessment does not include any mention of vibration sensitive businesses in Medford, such as a possible research and development facility which may be sensitive to vibration.

L-010-038
- The assessment should have included a technical appendix listing equipment used, certifications, etc.

L-010-039
- The discussion and assessment only pertains to effects felt by people. The background discussion should have included some discussion for assessment of possible house damage caused by large displacement oscillations of the rail track.

L-010-029

Section 5.7.1.3 of the DEIR/EA presents reference noise levels for MBTA trains. Noise and vibration modeling assumptions for the maintenance facility impact assessment are summarized in Chapter 2 of the FEIR and presented in detail as a technical appendix.

L-010-030

Section 4.8.2 of the DEIR/EA presents the methodology for quantifying existing noise conditions at sensitive receptors. Existing noise measurement sites were selected based on the location of noise-sensitive land uses along the proposed corridor, their proximity to the proposed alignment, and the existing terrain conditions. The distance from the measurement location to significant noise sources (e.g., commuter train line or streets where there is no existing train activity) was chosen to be representative of typical noise-sensitive locations in each area.

L-010-031

The expected performance of the proposed vibration mitigation reported in the DEIR/EA is based on vibration mitigation effectiveness and costs presented in Section 11.5 of the FTA guidance manual.

L-010-032

Potential vibration impact between Medford Hillside and Mystic Valley Parkway is less than other sections due primarily to the further setbacks of sensitive buildings to the rail alignment. Additional vibration measurements at sensitive receptor locations along the Proposed Project alignment have been conducted and will be further evaluated during preliminary engineering to provide more detail on vibration reduction mitigation measures needed for the Project. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

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KM Chng Environmental - DETAILED COMMENTS

Affected Environment – Noise (4.8)

L-010-040

1. 4.8.1 Introduction, page 4-63, the first paragraph may under emphasize the meaning of a sound pressure decibel by stating that a 3 dB change is a "barely noticeable change outside the laboratory", whereas a "10 dB change would typically be perceived as a doubling (or halving) in loudness". The reference for this statement is not given. Earlier research (e.g. Stevens, 1956), suggests this phenomenon; however, other research indicates that there is a range of 1-3 dB that is noticeable to many people and that a 6-10 dB difference is generally perceived as a doubling in loudness (e.g. Warren 1970). This is particularly true of louder sounds (above approximately 70 dBA). It should be noted that all physics reference texts define a doubling of sound pressure level as 6 dB. The term "loudness" is a psycho-acoustic term which can be confusing to the general public. Also, the discussion does not mention possible practical effects of project noise increases, such as levels which would limit normal speech, require extreme level adjustments in telephones and television sets, levels which might cause elevated stress, or learning disabilities, etc.
2. Table 4.8-1 Exiting Noise Measurement Results, page 4-67, the use of long term and short term measurements in the same column is confusing. For the short-term measurements, apparently Ldn was estimated, and shows a significantly larger variability (58-80 dBA) compared to the long-term measurements. This result casts some doubt on the use of these types of data and their consequent veracity in describing the existing environment. The data indicate that it would be perhaps less speculative to omit the short term Ldn "measurements" from the assessment, or else measurements should have been obtained using a measurement system that had been recording data for a complete 24 hours period.
3. 4.8.3.2 Noise-Sensitive Land Use, page 4-68 to 4-70, the discussions for each section of the project corridor do not explain the specific reasons for the variations in measured sound level. The short-term levels vary from 59 to 80 dBA, which is a large range for a generally homogeneous urban area. Although the introduction states that, in general, the measured noise levels were dominated by the heavy rail activity (commuter and Amtrak trains), the assessment does not describe adequately the noise contributions from other sources. Since the Ldn near train corridors will mostly reflect the level and duration for train events, the reader would not know whether the area is otherwise relatively quiet or noisy. For example, why is the Ldn at LT-1 64 dBA at 60 feet from the nearest track, whereas the Ldn at LT-9 is 71 dBA, which is also 60 feet from the track? Also, if there is significant variation in noise levels between different MBTA trains, the assessment does not account for this.

L-010-033

In accordance with FTA methodology, the DEIR/EA reports vibration levels for clusters of receptors which have similar exposure to vibration. This procedure simplifies the analysis that is required without compromising the accuracy of the analysis.

L-010-034

Comment noted regarding background discussion of noise.

L-010-035

Conducting short-term noise measurements is a methodology approved by the FTA for quantifying existing noise. More details are provided in Appendix D: Option 4 of the FTA guidance manual *Transit Noise and Vibration Impact Assessment*.

L-010-036

Additional vibration measurements at sensitive receptor locations along the Proposed Project alignment have been conducted and will be evaluated during preliminary engineering to provide more detail on vibration mitigation reduction needed for the Project.

L-010-037

As presented in Section 5.8.2 of the DEIR/EA, the research facility at 200 Boston Avenue, which contains vibration-sensitive equipment, would be expected to be acquired as part of the Project if it is extended to Mystic Valley Parkway.

L-010-038

Comment noted on listing measurement equipment used.

L-010-040

4. For the record, it would have been useful to have a technical appendix that lists the type and model of microphone, sound level meters, and other equipment or software used to measure the existing environment. The text mentions that audio recordings were made; however, there is no mention of anything learned from the audio recordings, assuming that observation personnel were not deployed for the full 24-hour measurement periods.

Affected Environment – Vibration (4.9)

L-010-041

1. 4.9.1 Introduction, page 4-71, the discussion briefly explains the common use of velocity amplitude to measure vibration levels for transportation projects. However, the text does not mention the relationship of ground displacement to certain types of structural damage. In some cases, a relatively large displacement of the rail, which can be caused by poorly maintained wheels and wheel truck suspensions, can cause cracks in surface building materials such as wallboard joints, and occasionally hairline cracks in concrete blocks and other similar rigid building materials.
2. 4.9.2 Methodology, page 4-72, the assessment only utilized one location to measure commuter train levels at Tufts University Alumni Field, and two other locations in Somerville to measure vibration propagation characteristics of the soil. In the interest of Medford residents living in dwellings north of the Tufts University athletic fields, the assessment should have included both existing train vibration measurements and soil/ground propagation measurements in this area between the proposed College Avenue station and the Mystic Valley station.
3. 4.9.4 Existing Vibration Conditions, page 4-73, the discussion and Figure 4.9-2 do not indicate how many trains were measured or what variation in levels were recorded. The range of levels can be significant since MBTA equipment on other lines has shown large variations, and receptors can be exposed to levels 10 dB or more greater than the average (KM Chng Greenbush Study).
4. 4.9.5 Vibration-Sensitive Land Use, pages 4-74 to 4-76, although the general discussion states that vibration is "generally dominated by trains" on the MBTA commuter rail lines, the individual discussion for each section do not identify any other source of vibration. It seems unlikely that there would not be any other vibration sources, such as heavy trucks on uneven pavement. If other sources exist, it might be helpful to know what and where they are, and what the typical levels are, to compare them to commuter rail levels.
5. 4.9.5 Vibration-Sensitive Land Use, page 4-76, the assessment only mentions Tufts University buildings as sensitive land use. According to Medford city officials, there may be corporate R&D facilities in this section, which employ hundreds of Medford residents that may also be sensitive to project induced vibration effects.

L-010-039

It is extremely rare for vibration from train operations to cause any building damage, even minor cosmetic damage.

L-010-040

Noise impact is assessed against criteria established by the FTA which are based on well-documented research on the human response to community noise. Conducting short-term noise measurements is a methodology approved by the FTA for quantifying existing noise. More details are provided in Appendix D: Option 4 of the FTA report, "Transit Noise and Vibration Impact Assessment."
The contribution of existing noise source to the measurement results are described for all noise-sensitive land use areas along the Proposed Project alignment in Section 4.8.3.2 of the DEIR/EA. As presented in the DEIR/EA, the significantly lower existing noise environments are where there is no existing train activity.

There are several factors for why the existing noise levels from MBTA commuter trains vary according to location. Site LT-1, for example, is on the Fitchburg Line, which has a different number of commuter trains operating than sites along the Lowell Line. Further, commuter rail trains at this site are generally traveling at a much slower speed than along sections of the Lowell Line. Topographical features such as retaining walls and sloped terrain also account for differences in existing noise levels from the commuter trains.

Comment noted on listing measurement equipment used.
As stated in Section 4.8.2 of the DEIR/EA, audio recordings were used to identify train activity.

L-010-041

Vibration impact for potential human annoyance and potential damage to nearby buildings is assessed according to FTA guidelines on the

L-010-041

6. As stated for the noise section, it is useful to include a technical appendix, which would at least contain a list of the measurement equipment, software, and any techniques that would be required to obtain results similar to those shown in the assessment.

Environmental Consequences – Noise (5.7)

L-010-042

1. 5.7.1.3 Noise Reference Levels, page 5-107, the data presented for noise reference levels does not contain details to explain the appropriateness of using the Green Line D Branch data. There is no technical appendix to show this data so that others can assess it. For example, can it be assumed that the rail and track system that will be used for the Green Line Extension will be the same as the D Branch? What is the variance for the measured D Branch data? Is the Lmax of 81 dBA an average of all the data that was used, or a worst-case sample? The value used for wheel squeal for the green line vehicles (Lmax = 86 dBA) may be reasonable; however, the FTA manual indicates that the level could be as high as 100 dBA (SEL = 136 dBA
2. 5.7.1.3 Noise Reference Levels, page 5-107, the data presented does not include any information relating to noise sources associated with the maintenance facility. Without this information, it is difficult to determine whether the noise generated from this facility is reasonably accounted for.
3. 5.7.1.3 Noise Predication Model, page 5-107, the description does not provide details explaining how the receptor locations were determined. It would be helpful to know if the positions were determined from current aerial photography, or perhaps older mapping data. If so, were receptors and buildings checked by on site inspection? How was it determined whether to use indoor or outdoor locations, and where can one find the exact point where the calculation was made? Assuming this type of information is available, it might be helpful to residents who would like to check whether the point used for the calculation is appropriate to them.
4. 5.7.1.3 Noise Predication Model, page 5-107, the description does not give details as to where and how noise levels from measurement locations were mapped to receptor locations to determine impact criteria. It is possible that some locations may have a higher or lower impact criteria because a noise level was used from a measurement location several hundred feet away, which a resident of the area may dispute as being typical for their residence. This is a technical problem which could lead to inaccurate results
5. 5.7.2 Noise Impacts, Table 5.7-1 and 5.7.-2, these tables aggregate the data for several individual locations into clusters of 1 to 19 buildings. We understand that this is necessary to avoid long tables with as many as 188 individual buildings. However, without a technical appendix providing data for each building, it is difficult for reviewers, residents or concerned citizens to determine what level of noise individual locations would be subjected to. It seems unlikely that clusters of as many as 19 buildings would be the same distance from the near track and would be subject to the same impact criteria. We would suggest that the assessment report should at least include readings for every building in the appendix.

vibration velocity inside buildings. Vibration generated by commuter and light rail trains is generally much lower in level than what is needed to produce even minor cosmetic damage to buildings.

Additional vibration measurements at sensitive receptor locations along the locally-preferred alternative have been conducted and will be evaluated during preliminary engineering. At residential buildings, the vibration levels of other sources such as heavy trucks on uneven pavement are not relevant to the assessment of potential impact from the Proposed Project.

Noise and vibration impact has been assessed at all locations known to be sensitive along the project corridor. Medford City officials may be referring to the building at 200 Boston Avenue which contains research and development equipment that is sensitive to vibration. As presented in Section 5.8.2 of the DEIR/EA, the research facility at 200 Boston Avenue, which contains vibration-sensitive equipment, would be expected to be acquired as part of the Project if it is extended to Mystic Valley Parkway. The locally-preferred alternative does not extend to this building. MassDOT will coordinate with Tufts University to confirm/identify the locations of vibration-sensitive equipment on the campus and the future Integrated Research Lab, assess the potential for impact and propose mitigation as needed. Findings of impact and mitigation recommendations will be evaluated during preliminary engineering.

L-010-042

As described in Section 5.7.1.3 of the DEIR/EA, measurements were conducted on the existing Green Line which uses jointed rail. The Proposed Project intends to use continuous-welded rail which typically generates lower noise levels than jointed rail. The maximum noise level and SEL at 50 feet and 50 mph on ballast and tie track reported in the DEIR/EA is an average level based on measurements of many trains at

L-010-042

6. 5.7.2 Noise Impacts, Table 5.7-1, there is an error in the totals for Potential Noise Impacts where the totals for the segment between Fitchburg Mainline and Medford Hillside Alternatives 1, 2, 3, and 4 should be 120 moderate impacts and 46 severe impacts. In addition, there are errors in the number of impacts for each of the alternatives in Tables 5.7-1 and 5.7-2 and the totals in the Impact Summary Table 5.7-3. Note that impacts refer to individual buildings and not units within buildings.

7. 5.7.2 Noise Impacts, page 5-113, in the first paragraph the text states, "typically, this increase [1-2 dB due to the green line trains] is not perceptible to humans". This statement appears to be based on cumulative calculated numeric Ldn values. However, in reality, because the frequency of green line trains is higher than commuter trains, it is likely that the noise from the green line trains will be perceptible when events occur. It should be noted that in many cases the noise from the green line trains, although not as noisy as the commuter trains, will easily be heard above background noise, and the cumulative effect of the two trains passing by at different intervals might be more annoying to residents than this statement suggests.

L-010-043

8. 5.7.2.1 Temporary Construction Noise Impacts, this paragraph only contains a cursory review of generic construction activity and suggests that "temporary noise impacts could result from construction activities...". In all likelihood construction activity will result in considerable noise impact to the various neighborhoods for perhaps a prolonged period of time. In addition, it may be necessary to conduct operations during nighttime when the impact is more severe. A more detailed accounting of likely construction activities, and a quantitative analysis relating noise levels to the predicted project noise levels would be useful to provide town officials and residents with a clearer picture of the real noise impact of the project. Such data could also be useful at a later stage of the project so that appropriate mitigation and its costs can be factored into the true cost of the project.

L-010-044

9. 5.7.3 Noise Mitigation, page 5-118, in the first paragraph it is noted that "at some locations projected to be exposed to noise impact, noise barriers may not be feasible or effective". There appears to be a wide range of areas for which noise barriers are prescribed earlier in the report; however, for various reasons will no be possible. The extent to which noise barriers, which are listed in Table 5.7-4 are unlikely to be a feasible alternative could have been shown in a separate table or figure. Table 5.7-4 may portray a misleading view of the level of mitigation that may be possible with this project. In some cases the height, location, or lack of egress through the barrier may pose a problem that may limit the use of barriers in other project areas than those mentioned. It should be noted that the Medford police chief and fire chief are concerned about possible safety issues associated with tall massive barriers. Although it is understood that barrier design details are not worked out until final design, Medford city officials would have preferred to see some perspective renderings of a typical barrier in one of the Medford neighborhoods. The generic barrier textures included in the assessment are not sufficient to portray the visual and safety consequences.

10. 5.7.3 Noise Mitigation, page 5-118, the last paragraph discusses wheel squeal on Somerville Avenue near Allen Street where rail lubrication is suggested as a mitigation technique. The discussion does not include a

a range of operating speeds. The modeling assumption for potential wheel squeal is based on detailed measurements of light rail trains on tight-radius curves for a similar transit system.

Detailed noise and vibration modeling assumptions for the maintenance facility impact assessment are presented as a technical appendix to the FEIR. As described in Section 5.7.1.3 of the DEIR/EA, noise impact is assessed at locations whichever is closer between outdoor areas with frequent human use and the façade of the building. Existing noise measurements were mapped to each sensitive receptor based on many factors including proximity to the measurement location, intervening terrain and the speed of existing commuter trains. The DEIR/EA reports noise levels for clusters of receptors which have similar noise environments. In accordance with FTA methodology, residential neighborhoods and relatively large outdoor noise-sensitive areas are typically clustered, simplifying the analysis that is required without compromising the accuracy of the analysis. More detail on clustering of receptors can be found in DEIR/EA Section 6.1.3 and Appendix C of the FTA guidance manual.

The results in Tables 5.7-1, 5.7-2 and 5.7-3 are correct as shown in the DEIR/EA. Footnote 5 and 6 of Table 5.7-1 explain that receptors at Burget Avenue refer to either Alternative 1 and 3 or Alternative 2 or 4. These footnotes have been revised in the FEIR to make this more apparent to the reader.

L-010-043

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels,

L-010-044

rough cost estimate, as in the other mitigation options. It is possible that the cost of such an option would make this an unlikely mitigation option. It should be noted that, in the interest of exploring various mitigation options at this stage of the project, other techniques such as damped wheels, rubber wheels, flange modifications, improved wheel maintenance procedures, etc. could have been included. Ideally, a rough cost estimate, or explanations of practicality, might be included so that the likelihood of implementation might be assessed.

11. 5.7.3 Noise Mitigation, page 5-119, the last paragraph states that "the proposed noise barriers, potential sound insulation, and rail lubrication would be effective in mitigating all potential noise from the Project". However, to the extent that all these mitigation options are actually not feasible, this assumption is not valid. Therefore the summary statement "there would be no moderate or severe noise impacts from the Project" is likely to be inaccurate.

L-010-045

12. 5.7.3.1 Construction Noise Mitigation, page 5-119, the list of mitigation options is cursory and generic. It would have been useful to develop more detail for this potentially very significant noise problem for the project, including possible required nighttime activities.

Environmental Consequences – Vibration (5.8)

L-010-046

1. 5.8.1.2 Vibration Reference Levels, page 5-124, the section "Planned Operations" states that Green Line tracks will be on ballast and tie including a "boat section" which is a concrete slab approximately 2 to 3 feet thick. It is not clear from the discussion that follows in the section "Vibration Reference Levels" that the Green Line D Branch data, used for reference levels, is equivalent to the concrete slab mounting. The type of mounting can have an effect on vibration propagation. It would help to have a sentence stating that the concrete slab design was properly accounted for in the assessment process.

2. 5.8.1.2 Vibration Reference Levels, page 5-124, the text shows a range of 63 to 69 VdB for Green Line cars, and a range of 74 to 87 VdB for MBTA commuter trains. The discussion is not clear as to the actual value(s) used for level computations. It would be helpful to state the actual level used and the basis for using that particular value. It should be noted that the range of levels is consistent with measurements performed by KM Chng. The median of the range of levels is somewhat lower than the general ground surface vibration curves shown in the FTA manual for 50 mph speeds. The levels used for Amtrak trains were significantly less than the FTA vibration curve for locomotives. On occasion, KM Chng has recorded vibration levels for MBTA commuter trains that are greater than 87 dBA (MBTA Greenbush and South Coast measurements). When considering the implementation of the MBTA methodology, the large variance of MBTA commuter vibration levels should be considered. During recent measurements of the Greenbush line conducted by KM Chng, anecdotal remarks from residents living within

and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

L-010-044

All noise barriers proposed for the Project in Table 5.7-4 of the DEIR/EA are expected to be feasible, reasonable, and effective. Detailed noise barrier designs will be completed during the final design of the project. Receptors where potential noise barriers may not be feasible or effective and sound insulation mitigation is being considered are specified in Section 5.7.3 of the DEIR/EA. Mitigation recommendations for these receptors will be evaluated during preliminary engineering. MassDOT will coordinate with emergency response providers to plan for appropriate site access at noise barrier locations during preliminary engineering.

When necessary and feasible, rail lubrication mitigation is considered a reasonable expenditure according to FTA. Mitigation proposed for the project is considered to be necessary, effective and feasible; therefore, the summary statement that no moderate or severe noise impacts would result from Project is accurate.

L-010-045

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

L-010-046

Comment noted regarding description of the proposed trackform. Comment noted regarding consistency in vibration results reported in the

L-010-046

approximately 75 feet of the rail noted that some trains caused noticeable vibrations including "rattling of dishes and shaking of picture frames"; whereas, other trains were not discernible. This seemed to correlate with a measured range of approximately 75 to 95 VdB, normalized to 50 feet, for approximately 30 measurements. Finally, it should also be noted that the outcome of the KM Chng MBTA vibration measurement program showed that actual measured levels showed a range from 14 VdB above FEIR predictions to 12 VdB below predictions. When considered in total, the average was only 0.3 above the FEIR prediction, which indicates very good agreement with the methodology used, which is similar to that used for this assessment. Nonetheless, it also true that, on an individual basis, several residents experienced vibration levels much greater than predicted in the FEIR.

3. 5.8.2 Vibration Impacts, page 5-127, Table 5.8-4, the aggregation of clusters of impacts and the lack of a technical appendix showing levels at individual receptors makes it difficult for the public to determine the magnitude of vibration on an individual basis.

4. 5.8.2 Vibration Impacts, page 5-127, Table 5.8-4, when comparing the impacts in the segment between Medford Hillside and Mystic Valley Parkway, to the impacts in the segment between Lechmere Station and Medford Hillside, the total number of impacts seems proportionally low. In particular, for the cluster listed as "Brookings Street", where distances to the track are similar to "Auburn Avenue near McGrath Highway", future commuter levels are 8 VdB less, and future Green Line levels are 5 VdB less at the Medford location. It would be helpful to explain these differences, particularly since it appears that ground propagation measurements were not performed in this section of the project.

L-010-047

5. 5.8.2.1 Temporary Construction Vibration Impacts, page 5-128, the discussion only mentions pile driving. It would be helpful to know what other activities, if any, might produce annoyance or structural damage. It would also be helpful to have an estimate for the duration and intensity of pile driving activities, and operations that may have to occur overnight.

L-010-048

6. 5.8.3 Vibration Mitigation, page 5-130, Table 5.8-6, much of the mitigation relies on the use of ballast mats, which are assumed to have a 10-15 VdB reduction in levels. Although this is the range of possible reduction stated in the FTA manual, there is some evidence that real world installations of ballast mats can fall short of manufacturer claims. KM Chng performed a very limited evaluation at one of the sections of the Greenbush line after the installation of ballast mats, which failed to show any significant measurable reduction in vibration level. Although the actual value used for vibration level reduction is not stated in the assessment, it would be helpful to know what the value is, and what the justification is for using that value. A similar argument might be made for the use of resilient fasteners, which can show significant variability in effectiveness, depending on several factors. We do recognize that ballast mats and resilient fasteners can be effective in reducing vibration; however, it is important to be realistic about what they can achieve. During our Greenbush vibration measurement program, some expressed the opinion that improving MBTA wheel maintenance may be a more cost effective solution to the problem of MBTA commuter train vibration levels.

DEIR/EA with other studies.

The DEIR/EA reports noise levels for clusters of receptors which have similar noise environments. In accordance with FTA methodology, residential neighborhoods and relatively large outdoor noise-sensitive areas are typically clustered, simplifying the analysis that is required without compromising the accuracy of the analysis. More detail on clustering of receptors can be found in DEIR/EA Section 6.1.3 and Appendix C of the FTA guidance manual.

Comment noted regarding variability in vibration level projections.

L-010-047

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

L-010-048

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Additional vibration measurements at sensitive receptor locations along the Proposed Project have been conducted and will be evaluated during preliminary engineering to provide more detail on vibration mitigation reduction needed for the Project. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

City of Medford

OFFICE OF THE BUILDING COMMISSIONER

PAUL F. MOCHI
Building Commissioner

City Hall - Room 115a
85 George P. Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2509
FAX: (781) 393-2415
TDD: (781) 393-2513

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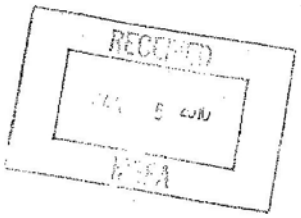


December 30, 2009

Secretary Ian Bowles
Executive office of Energy and Environment
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA Number # 13886
100 Cambridge Street
Boston, MA 02114

I have reviewed the Green Line Extension Project Draft Environmental Impact Report dated October 2009. There are several areas of this report that I am commenting on with respect to my jurisdiction as Building Commissioner that concern building code and zoning ordinance issues.

Building Code Issues

L-011-001

The proposed stations at College Avenue and Mystic Valley Parkway/Route 16 are shown outlined on aerial photos, and are depicted in several schematic sketches throughout this report. A full set of construction documents will be required to determine that these stations will be built in compliance with the Massachusetts State Building Code. In addition to architectural and structural drawings, I will also need borings and subsurface exploration reports to determine that the soil bearing capacity at these sites is sufficient to support these new structures.

L-011-001

The DEIR/EA and FEIR include only conceptual station designs and station design criteria. Designs for each station and the entire project alignment will be refined during the Project's preliminary engineering stage. A full set of construction documents will also be prepared. Additionally, supporting data such as geotechnical, survey, and hazardous materials testing will be developed to support the design work. The process for coordinating with the local communities during station design are described in the Public Involvement Plan, Chapter 6 of the FEIR.

Green Line Extension Report

Page Two

L-011-002

The report shows an enlargement of the existing embankment within the MBTA right of way at the College Avenue station to accommodate the new station and green line tracks. In order to do this a large section of the existing embankment will be removed, and new retaining walls will be erected. This embankment is a steep slope, and I would need to see plans on the retaining wall design to ensure the new wall construction will be capable of resisting the hydrostatic pressure of the soils it will be retaining, as well as earthquake loads and vibratory loads from the trains. There was no plan on how to retain this embankment during construction of the station and new retaining walls. I will need to know if any sheet piling will be installed, or if there is any other method being planned to provide temporary support and shoring of the embankment during construction.

There are several areas along the train route where excavation of the hillside will be performed in close proximity to existing structures. Therefore, I need to see detailed plans on the methods of constructing the stations and retaining walls in order to assure none of the footings and foundations of these structures will be undermined in any way, and that the structural integrity of these structures will not be compromised. The report also did not mention anything about pre-construction surveys of any structures that may be affected by this construction.

L-011-003

The report did discuss using ballast mats and special trackwork to minimize any vibratory loads from the trains, but there were no specific details listed on how these items will work to achieve this goal.

L-011-004

I will also need to know what type of excavation will be involved in this work; whether there will be any blasting, pile driving, vibratory compactor operations, and just what type of site work will be performed in order to assure proper bracing of existing embankments and structures adjacent to this construction.

There was also not a detailed plan of construction operations. I need to know what type of staging areas for equipment and material will be utilized, where these areas will be located, and how certain operations will be performed; such as any pile driving equipment, heavy duty cranes, concrete pumping equipment, etc. The report did not specify any details regarding delivery of heavy equipment or pre-fabricated building components of a large magnitude to the site that would necessitate delivery by large tractor trailers that could involve special delivery arrangements, and coordination of police details, closing public roads, etc.

L-011-002

The DEIR/EA and FEIR include conceptual Project designs. Designs for all project elements, including retaining walls and construction techniques, will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

L-011-003

MassDOT will comply with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Mitigation measures will be further refined during the preliminary engineering phase.

L-011-004

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

Green Line Extension Report

Page Three

L-011-004

I would also like to receive details on where construction materials will be stored, and where contractors will be parking their vehicles during hours of construction. Any temporary office trailers will also have to be located on the plans, and permitted by this office.

Zoning Issues

L-011-005

I will need to know if any of this work involves the taking of land along any areas other than the Mystic Valley Parkway/Route 16 station. If this is the case I will need to review plans to see if there would be any zoning ordinance violations, or if any existing non-conforming properties will have their non-conforming nature increased, which is not allowed under the City of Medford Zoning Ordinance. Any lots that may be subject to reconfiguration due to a land taking may require a subdivision plan that needs to be endorsed by the Planning Board.

L-011-006

The Mystic Valley Parkway/Route 16 station is going to require the demolition of 6 buildings, with #'s 196 & 200 Boston Avenue, and the u-haul building being among them. I will need to know if any other structures will also be demolished. The report also states that this area will be redeveloped for a mixed use type of development, with the possibility of a parking garage. However there are no specific plans to determine if this new development will be in conformance with the allowed uses and dimensional requirements of the City of Medford Zoning Ordinance. A more detailed plan will need to be reviewed in order to determine such compliance. In addition to the 6 buildings mentioned that may be demolished, I will also need to know if there are any other properties in this area that may be involved with a land taking to determine if there would be any zoning violations at these sites also.

L-011-005

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

L-011-006

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Green Line Extension Report

Page Four

Conclusion

I will need to receive more detailed plans, construction documents, and a construction schedule to determine compliance with the Massachusetts State Building Code and the City of Medford Zoning Ordinance. I will also need a detailed cost of construction for the stations and retaining walls to determine the applicable building permit fees that would need to be applied to this project.

Very truly yours,

Paul F. Mochi
Building Commissioner

Xx: Mayor Michael J. McGlynn
Lauren DiLorenzo – Director, Office of Community Development

City of Medford

OFFICE OF COMMUNITY DEVELOPMENT

LAUREN DILORENZO
Director

City Hall - Room 308
85 George P. Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2480
FAX: (781) 393-2342
TDD: (781) 393-2516

December 22, 2009

Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

Please accept these comments on behalf of the City of Medford's Office of Community Development. While the Draft Environmental Impact Report/Environmental Assessment provides useful diagrams and maps, the substance of the report is lacking the detail necessary to be reviewed as a final document. The project is proposed to be constructed in two separate phases and should be reviewed accordingly. The DEIR does not provide sufficient detail regarding the proposed station location, access and impacts at the preferred terminus at Boston Avenue and Mystic Valley Parkway nor does it recognize the fact that the station location at Boston Avenue and College Avenue will operate and function as a terminus until or unless the Mystic Valley Parkway station is constructed. A Final EIR should be prepared with College Avenue as a proposed terminus. A Draft EIR should be prepared for the extension from College Avenue to Mystic Valley Parkway. I appreciate your consideration of the comments that follow.

L-012-001

1. Land Use, Social and Environmental Resources

L-012-002

L-012-003

The DEIR did not sufficiently identify impacts on properties within the project area, determine changes in land use, and describe how it will contribute to gentrification of existing residents and businesses. Alternative designs of the extension to Mystic Valley Parkway should have been provided to minimize the taking of private properties which will create significant job and tax revenue loss.

While the creation of mixed use high density transit oriented development may be desired in underutilized areas adjacent to stations in Somerville, whether high density development is feasible in the areas around Ball Square, College Avenue and Mystic Valley Parkway within Medford warrants further study.

L-012-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

L-012-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

L-012-003

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-012-004

The DEIR failed to present the corridor planning study as required and provides little useful information to evaluate social and economic impacts within Medford. The Secretary should require MassDOT to conduct a full corridor study prior to the submission of the FEIR. It was never the City of Medford's understanding that an earmark of funding for the City to do land use planning alleviated the EOT from meeting its obligation to do so as part of the DEIR.

Direct effects of land acquisition are caused by the project. The extension to Medford Hillside will result in the full acquisition of 662, 664, and 665 Broadway for the construction of the Ball Square Station. Portions of 474, 590 and 179 Boston Avenue will be taken for laying of track (Table 5.2-1). These takings are within the street right of way.

The proposed extension to Mystic Valley Parkway/Route 16 will add twelve (12) takings including a partial taking of 590 Boston Avenue (Gas Station lot), 474 Boston Avenue (lot of Tufts Student offices/coffee shop), 220 Boston Avenue (office) and 200 Boston Avenue (R & D). There are additional street right of way takings along Boston and College Avenue and a small taking of land from a house lot on Piggott Road and from a lot on 200R Boston Avenue.

The anticipated tax effects from the construction of Alternative I (Extension to College Avenue) is $15,777 with no jobs lost. The Extension to Mystic Valley Parkway is anticipated to result in a loss of $182,886 in tax revenue. Job loss is as follows: 600 Mystic Valley Parkway (13), 222 Boston Avenue (30) 200 Boston Avenue (194). The report assigns the loss of five (5) jobs at 662/664 to Somerville.

The report states that the loss of 224 jobs in Medford as a result of constructing the MVP/Rte 16 station does "not represent a significant fraction of jobs in these three cities" and later the report states the jobs at stake "represent at most a minimal economic impact". This conclusion is self serving and does not provide any recognition of the importance of retaining jobs in the current economy. Of more importance is the effect of job loss on individuals and their families and businesses in Medford.

L-012-005

The FEIR should contain an analysis of the true cost of job loss and the cost of job creation. The assertion is made that these jobs will be relocated locally with no substantiation of the claim.

2. Environmental Justice

L-012-006

The report does not adequately address impacts to the Walking Court elderly housing development. Access by the elderly and the disabled to public transit and to area businesses and services during construction must be more fully evaluated. The shift

L-012-007

of the existing commuter rail tracks to the east should be more fully evaluated for health impacts to special populations.

L-012-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

L-012-005

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

L-012-006

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases. Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community

L-012-008 Meetings should be conducted with special populations that are less likely to attend a large public hearing in an adjacent city. These should be required prior to the acceptance of any environmental review document proposing the extension to Mystic Valley Parkway.

3. Air Quality

L-012-009 The report does not contain specific information that measures the current versus full-build analysis on the residential neighborhoods between College Avenue and Mystic Valley Parkway that could be adversely affected by the shift of existing commuter rail tracks with diesel run cars, to the east.

4. Noise and Vibration

L-012-010 Noise impacts due to the introduction of the more frequently run Green Line trains versus existing operations, as well as the shift of the existing commuter rail lines, will increase noise levels. Moving the commuter rail lines to the east will adversely impact residents. Additionally, the close proximity of homes on Allston Street and Piggott Road will be especially burdened. Homes and businesses close to bridges that must be reconstructed will also be adversely affected during construction. Nightime construction should not be allowed. Noise barriers should be installed the length of the right of way in Medford. In addition to and not in place of barriers, sound insulation techniques should be employed at homes as well as businesses along the right of way. The report identifies that the extension to MVP/Rte.16 will add an additional 50 moderate and 24 severe residential noise impacts. Given that the majority of homes in Medford are older, opening windows will lessen the value of sound insulation techniques resulting in unacceptable noise levels.

Vibration impacts will similarly impact properties and are expected to be especially adverse at locations near bridges where there will be pile driving. Compacting will also result in adverse noise level. The DEIR identifies over ninety (90) homes and three (3) institutional buildings that will be adversely affected with no mitigation proposed during construction.

L-012-011 The proposal to construct a tunnel from College Avenue to Mystic Valley Parkway should be further evaluated for its benefits to air quality and noise.

5. Visual

L-012-012 The report inadequately addresses visual impacts from the loss of vegetation in or near people's yards, construction of noise barriers and station designs. Additional information including more detailed designs and alternative designs are necessary along with adequate public involvement to reduce the proposed impacts to the visual environment.

3

involvement during the next phases of the Project: design and construction.

L-012-007

The preparation of a health study is beyond the scope of the Green Line Extension Project. However, the Project will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality.

L-012-008

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach, including to environmental justice populations, in the next phases of the Project.

L-012-009

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency. The segment from College Avenue to Mystic Valley Parkway is not part of the Proposed Project.

L-012-012 The final approval of the project should prohibit the MBTA from installing or leasing property to construct billboards or cellular towers along the right of way in Medford.

6. Historic Resources

L-012-013 The proposed extension to MVP/Rte 16 should include an alternative analysis that includes reconstructing the rail bridge crossing at Mystic Valley Parkway and moving the station platform in that direction. This may enable less impact to commercial properties in Medford and allow for better access by buses, vehicles, pedestrians and bicyclists. Changes should be done with respect to the character of the historic structures eligible for National Register designation which should be inventoried as well as the one historic archeological site, a portion of the Middlesex Canal. Project representatives should meet with the local Historic Commission during the next stage of design.

7. Hazardous Materials

L-012-014 The project involves construction in several areas with known environmental issues. The removal of existing rail lines treated with chemicals requires a comprehensive approach along with coordination with state and local officials to insure proper remediation. Area residents should be informed as to the status of identification and remediation of sites and protected during remediation. Stockpiling of removed contaminated rail ties should not be allowed. Best management practices should be used when addressing removal of hazardous materials. A project representative should be available to address concerns raised by neighbors, businesses and governmental officials relative to all hazardous material issues including dust control. The individual's telephone number should be made available to the public for quick response.

8. Traffic

The No-Build Alternative assumes the Urban Ring transit service is operational. The peak hour estimates of pedestrians and bicycles at Ball Square is 670 and at College Avenue is 760 with an additional 30 and 40 persons respectively being picked up or

L-012-015 dropped off. The report does not adequately account for the high estimates of walkers and low estimates of pick up/drop off.

The report states the intersection level of services would be improved by signal timing and phasing at Main Street/High Street/Salem/Forest and Riverside. The report projects the morning peak hour would improve from F to E and the evening peak hour from D to C. Additionally, the report asserts an improvement at Mystic Valley Parkway/Route 16 at Boston Avenue from F to E in the AM peak hour but continues to operate in a failed condition during the evening peak hour. Level of service degradation would occur at Boston Avenue/Winthrop Street from E to F in the evening peak hour. Boston Avenue/College Avenue would degrade from E to F in the AM peak hour.

4

L-012-010

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented. Mitigation measures for noise and vibration in the vicinity of College Avenue functioning as a terminus are described in FEIR Chapters 5 and 8.

L-012-011

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

L-012-012

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project, including addressing impacts to the visual environment.

L-012-013

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-012-016 For a public transit project of this magnitude and expense it is unacceptable for the local roadway network to not have a discernable improvement in operations. The Proponent should be required to make improvements to all intersections to a level of Service of D or better. Local communities cannot be expected to bear the burden of correcting the unacceptable roadway operations. The Proponent should be required to provide additional information on the intersections of Harvard Street with Willis Avenue and Harvard Street and Mystic Avenue. Truck trips, especially with the impact of the loss of freight rail must be addressed along with the identification of acceptable trucking routes.

L-012-017 The following signals should be reconstructed as required mitigation of the project and synchronized with lighting along the corridor.

1. Mystic Avenue/Harvard Street
2. Harvard Street/Willis Avenue
3. Harvard Street/Boston Avenue
4. Boston Avenue at Winthrop Street
5. Boston Avenue at North Street
6. Boston Avenue at MVP
7. Boston Avenue at High Street
8. College Avenue at George Street
9. George Street at Main Street
10. Main Street at South Street
11. Main Street at MVP
12. Main Street at High Street, Forest and Salem Streets

L-012-018 The proponent was requested by this Office to evaluate the feasibility of reducing the five-legged intersection at Boston and College Avenue by prohibiting north bound traffic from the Somerville direction on College Avenue. This traffic change would also have allowed a much greater area for pedestrians and a possible station entry point on College Avenue itself. This concept should be explored in the FEIR.

L-012-019 In order to insure maximum pedestrian access the proponent should be required to fund the design of a DCR path linking the terminus to the Condon Shell pathway system. Pedestrian access from West Medford must be improved.

9. Parking

L-012-020 The Secretary's Certificate required the development of the traffic scope of work with the local municipality. I do not recall a meeting in regard to this matter. Furthermore, the DEIR was to contain useful information regarding approaches to issues such as traffic enforcement. The FEIR should contained a detailed parking and enforcement plan prepared in consultation with the City to minimize parking impacts in local residential and businesses areas.

5

L-012-014

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

L-012-015

Ridership projections presented in DEIR/EA Section 3.7 were developed by CTPS and include estimates for various access modes, including walking, biking, bus and car. Methods for developing the ridership estimate are described in DEIR/EA Section 3.4, Ridership Methodology. Additional details required by the Secretary's Certificate on the DEIR/EA are provided in FEIR Chapter 3, Air Quality.

L-012-016

As directed by the Secretary of Environmental Affairs in his December 2006 Certificate on the EENF, the purpose of the DEIR analysis "is not to hold EOT (now MassDOT) responsible for mitigating longstanding congestion problems but, rather, to identify the specific impacts and benefits of this project." In this spirit, MassDOT has made several suggestions for traffic mitigation at locations where the Proposed Project contributes to a decline in overall intersection level of service. The proposed mitigation is sufficient to mitigate Project impacts, but in most cases not sufficient to provide superior levels of service where they do not exist today.

Of the locations identified in the comment, the intersection of Boston Avenue and Winthrop Street and Boston Avenue at College Avenue are locations where LOS declines as a result of the Project. As discussed in

10. Construction Impacts

L-012-021 Traffic related construction impacts including temporary bridge closures, restrictions, traffic detours, and loss of parking during construction were highlighted as issues with no plan proposed to address them. The Proponent should be required to submit a more detailed assessment of these impacts and a plan to address construction impacts within the FEIR.

L-012-022 In summary, I respectfully request that given the need to provide a more comprehensive analysis and information, the Proponent should be required to file a Final Environmental Impact Report for Alternative 1. Additionally, I request that the Secretary determine that insufficient information has been provided for the project to be to reviewed past College Avenue and that a separate filing of a Draft EIR be required for that portion of the project.

Very truly yours,

Lauren DiLorenzo
Director

Postscript

To insure that Medford residents were well represented during this environmental review process, Mayor McGlynn asked that I coordinate the involvement of the various department heads organizing briefings on the project and facilitating their review of these voluminous documents. Several of these individuals will submit letters to you identifying concerns or issues that are related to their particular area of expertise.

However, I would like to highlight the letter of one individual in particular, my colleague Brian Boudreau, Superintendent of Wires. Brian passed away suddenly and unexpectedly December 5, 2009. He held his position with the City for less than one year. He took his responsibility to represent the residents of Medford in this process seriously, reprioritizing his daily activities to learn about this complex project so that he could identify any potential concerns. His memorandum to Mayor McGlynn is attached.

LD/ab

Attachment

6

the DEIR/EA, mitigation that improves intersection operations is proposed at these locations.

L-012-017

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

L-012-018

If College Avenue were converted to a one-way, southbound street at the intersection, reverse direction trips would need to make a significant detour via either Winthrop Street or Harvard Street. Potential benefits to pedestrians at the intersection may be outweighed by impacts to vehicular circulation. Air quality emissions may also increase as a result of increased vehicle miles traveled, having a detrimental effect on the surrounding neighborhood. A shorter one way couplet could be created with Dearborn Road. However, vehicle queuing for vehicles exiting Dearborn Road would encourage northbound traffic to use Bromfield Road as a potential cut through route. This potential impact to the local neighborhood is unacceptable and therefore this option was not considered further.

L-012-019

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

cc: Michael J. McGlynn, Mayor
Medford City Council
Congressman Edward Markey
Senator Patricia Jehlen
Representative Paul Donato
Representative Sean Garballey
Representative Carl M. Sciortino, Jr.
Mary Beth Mello, Deputy Regional Administrator, FTA
NEPA Reviewer, USDOT
Marc Draisen, Executive Director, MAPC
Barbara Rubel, Community Relations Director, Tufts University
Monica Lamboy, Director, Office of Strategic Planning and Comm. Development
Rita Donnelly, Representative Green Line Advisory Committee
Ken Krause, Representative Green Line Advisory Committee
Dr. William Wood, Representative Green Line Advisory Committee
Noah Chesnin, Conservation Law Foundation

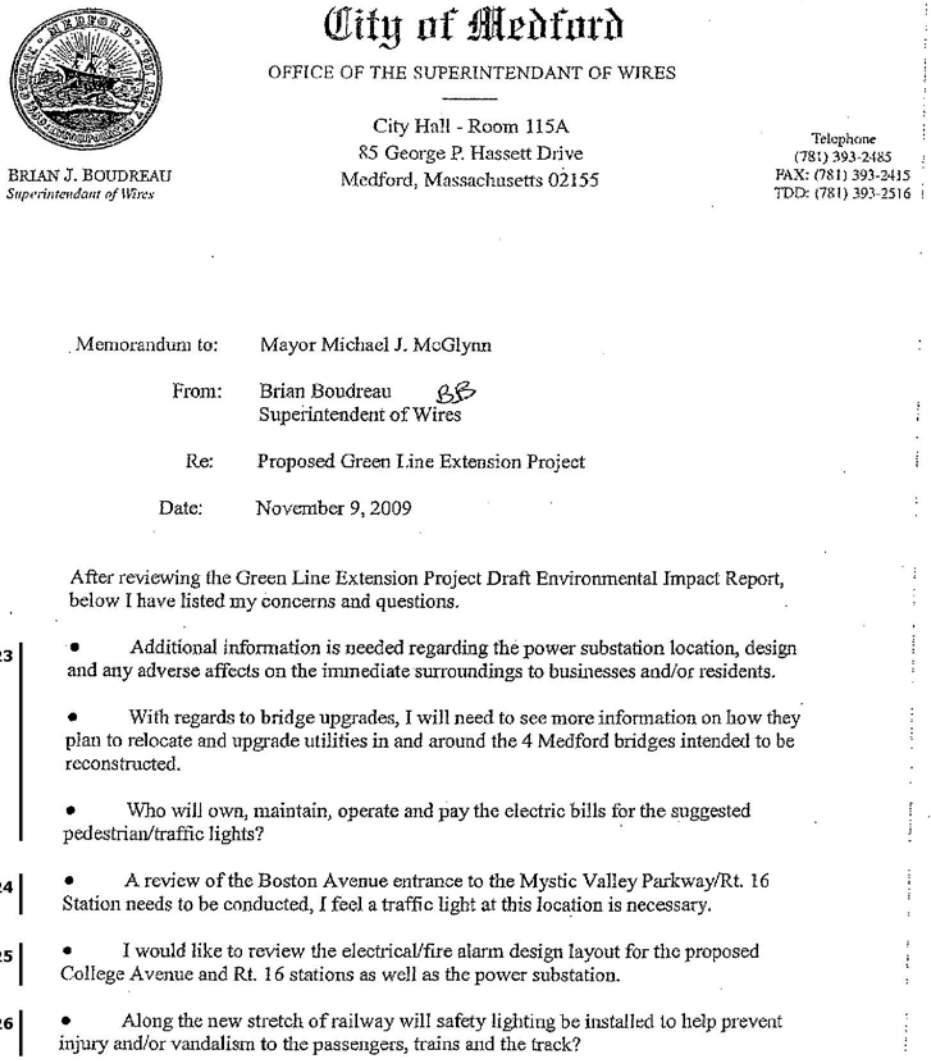
L-012-020

The City of Medford Office of Community Development was contacted in February 2008 to provide input into the traffic study being undertaken. At that time, the input provided by the City was to contact Tufts University and include any known projects in the development of the future traffic condition. No other suggestions were offered. At subsequent meetings with Town officials and residents, two additional intersections were requested to be included into the analysis for the DEIR/EA. MassDOT increased the scope of the traffic study to include these two intersections as requested.

DEIR/EA Table 6-1, Project Mitigation Commitments, lists the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures include parking enforcement coordination; which will be further detailed during preliminary engineering.

L-012-021

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Affected bridges are described in DEIR/EA Section 3.7.2. Detour routes, construction period parking management, and emergency access during construction will be developed during preliminary engineering as part of the Traffic Management Plan. At least one bridge will need to be closed during construction (Medford Street). A temporary bridge may be able to maintain a single lane of traffic at the Broadway Bridge. For all other bridges, at least one lane will be maintained during construction. Pedestrian and vehicular access to abutting properties will be maintained at all times. Project bridge designs and construction staging plans will be refined during preliminary engineering. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social



City of Medford

OFFICE OF THE SUPERINTENDANT OF WIRES

BRIAN J. BOUDREAU
Superintendant of Wires

City Hall - Room 115A
85 George P. Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2485
FAX: (781) 393-2415
TDD: (781) 393-2516

Memorandum to: Mayor Michael J. McGlynn

From: Brian Boudreau BB
Superintendent of Wires

Re: Proposed Green Line Extension Project

Date: November 9, 2009

After reviewing the Green Line Extension Project Draft Environmental Impact Report, below I have listed my concerns and questions.

L-012-023
- Additional information is needed regarding the power substation location, design and any adverse affects on the immediate surroundings to businesses and/or residents.
- With regards to bridge upgrades, I will need to see more information on how they plan to relocate and upgrade utilities in and around the 4 Medford bridges intended to be reconstructed.
- Who will own, maintain, operate and pay the electric bills for the suggested pedestrian/traffic lights?

L-012-024
- A review of the Boston Avenue entrance to the Mystic Valley Parkway/Rt. 16 Station needs to be conducted, I feel a traffic light at this location is necessary.

L-012-025
- I would like to review the electrical/fire alarm design layout for the proposed College Avenue and Rt. 16 stations as well as the power substation.

L-012-026
- Along the new stretch of railway will safety lighting be installed to help prevent injury and/or vandalism to the passengers, trains and the track?

resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during design and construction.

L-012-022

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

L-012-023

The DEIR/EA and FEIR include conceptual Project designs. Designs for all project elements, including traction power substations, will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

MassDOT will coordinate with utilities providers to minimize impacts to existing utility lines. Utilities on bridges identified for reconstruction would be rebuilt with the bridges. The existing MBTA drainage system will be reconstructed with proposed connections to the existing municipal drainage system.

In most cases, traffic signal improvements included in the Project are modifications to existing signals. The current signal owner will be responsible for maintaining and providing power to these signals. Where new signalized intersections are created, the jurisdiction maintaining the roadway will be responsible for signal maintenance.

L-012-024

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are no

longer included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16.

L-012-025

The DEIR/EA and FEIR include conceptual station designs. Designs for each station will be refined during the Project's preliminary engineering stage. MassDOT has and will continue to coordinate with the Study Area cities, as well as state and local agencies, at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and local priorities.

L-012-026

The DEIR/EA and FEIR include conceptual Project designs. Designs for the Project, including lighting and other safety measures, will be refined during the Project's preliminary engineering stage. The process for City coordination during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.



City of Medford

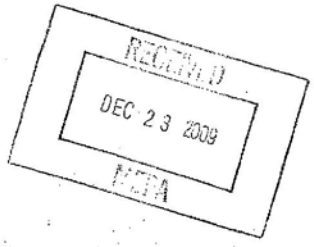
Energy & Environment Office

Medford City Hall
85 George P. Hassett Drive, Room 209
Medford, Massachusetts 02155
(781) 393-2137 Fax: (781) 393-2471
TTY: (781) 393-2516



December 21, 2009

VIA CERTIFIED MAIL
7006 0810 0000 2775 4384
Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
EEA No. 13886
100 Cambridge Street, Suite 900
Boston, MA 02114



Re: Draft Environmental Impact Report
Green Line Extension Project

Dear Secretary Bowles:

The City of Medford's Energy & Environment (E&E) Office appreciates the opportunity to comment on the Green Line Extension Project (the Project) Draft Environmental Impact Report (DEIR). The E&E Office is responsible for overseeing and implementing environmentally sound programs in the City of Medford including energy efficiency, air quality, climate change protection, wetlands protection, open space conservation, and stormwater management. The following comments and recommendations have been provided to assist in the MEPA assessment to fully describe the proposed project impacts and mitigation.

Wetlands

The Medford Conservation Commission protects the wetlands and waterways, conservation land and open space in accordance with the Massachusetts Wetlands Protection Act (M.G.L. c.131 Section 40) and the City Wetland's Ordinance (Chapter 87). Wetlands, waterways and their associated buffer zones and riverfront areas are extraordinarily important as they play a key role in protecting wetland functions and values like sediment/toxicant retention, floodflow alteration, fish habitat, nutrient removal/retention/transformation, sediment/shoreline stabilization, aesthetics, wildlife habitat and recreation for the public.

L-013-001 | Although this DEIR indicates that the proposed Project would not be located in any wetland resource areas or protection zones, the future full build alternative also proposed within the DEIR in Medford, Massachusetts appears that it may have a potential adverse impact to the wetland resource areas in Medford, therefore the full build alternative would require the filing of a Notice

L-013-001

There are no jurisdictional wetlands within the Proposed Project area, as described in DEIR Section 4.11, Wetlands. Study of the segment from College Avenue to Mystic Valley Parkway/Route 16 will be conducted when this phase is advanced.

L-013-001

of Intent application to the Medford Conservation Commission under the MA Wetlands Protection Act and the City of Medford Wetlands Ordinance (refer to DEIR Figure ES-1).

Plants

In accordance with the City of Medford's Climate Action Plan (2001), urban forestry can serve as an effective measure to achieve substantial CO2 reductions in addition to providing other social, economic and ecological benefits. Trees contribute to reducing CO2 by sequestering carbon and mitigating the effects of urban heat islands. Strategic planting of trees can shade buildings and air conditioning units from the direct rays of the sun, thereby reducing electricity needed for air conditioning. Lowering temperatures lessens the energy demand for cooling, which in turn reduces the burning of fossil fuels and the emission of CO2 and other air pollutants. **The City continues to demonstrate a proven commitment to tree planting and has a replanting policy that requires large projects like the Green Line Project to replace trees that are removed and replant with new native trees throughout the City. The Final EIR should indicate how the Proponent will comply with this policy.**

L-013-002

Air Quality

The goals of the Project are consistent with Medford's Climate Action Plan to reduce the amount of community greenhouse gas emissions by providing a means for alternative transportation among residents of Medford. Motor vehicle usage in Medford alone accounted for 38% of community emissions in 1998. Out of this, personal vehicles were more than 21%. The proposed Project and alternatives would result in a reduction of 5,031 to 22, 176 kilograms of CO2 emissions daily (Refer to Table 5.6-9). However these estimates do not indicate whether these greenhouse gas emission reductions include the additional greenhouse gas emission increases from vehicle trips created as a result of passenger drop off at new T-stops. These additional greenhouse gas emission increases from drop off vehicles should be included in the reduction analysis. **The FEIR should indicate whether increased vehicle trips from passenger drop off was or was not included in the greenhouse gas emission reduction analysis, and provide a table indicating the drop off estimates, and a description of the method used for determining the drop off vehicle rate.**

L-013-003

Thank you for the opportunity to comment on this project and we look forward to reviewing a Final EIR that fully describes the project impacts and mitigation.

Sincerely,

Patricia L. Barry, Director
Energy & Environment Office

Enclosure

cc. Mayor Michael J. McGlynn
Lauren DiLorenzo, OCD Director

Page 2 of 2

L-013-002

As the Project advances into preliminary engineering, efforts will be made to minimize the removal of trees where necessary. Also, opportunities to replace impacted landscaping outside of the MBTA's right-of-way will be considered.

L-013-003

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

MEDFORD FIRE DEPARTMENT

120 Main Street
Medford, Massachusetts 02155-4510

Emergency - 911
Business (781) 396-9400
Fire Prevention (781) 396-9831

FAX: (781) 396-4377
TDD: (781) 395-7587

FRANK A. GILIBERTI, JR.
Chief of Department

December 21, 2009



Ian Bowles
Secretary
Executive Office of Energy and Environment
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA Number #13886
100 Cambridge Street
Boston, MA 02114

Dear Secretary Bowles:

The Medford Fire Department submits the following public safety concerns regarding the Green Line extension:

L-014-001
- **Land Use**: The land use alternatives may, depending on the plan chosen, require demolition of up to 10 structures in Medford. If the track relocation results in steep walls, etc., as it implies, then emergency access points along the length of the tracks needs to be considered.

L-014-002
- **Socioeconomic Conditions**: Job loss could be affected by various plans. Increased usage could affect access to the stations and the area around the stations (pedestrians, bicycles, vehicle travel, and parking).
- **Environmental Justice**: Not applicable to the fire department.
- **Existing Transportation Systems**: Not applicable to the fire department.

L-014-003
- **Traffic**: Regarding traffic, considerable thought must be given to what are referred to as peak hour turning movement volumes at these locations. Specifically, how will these calculation projections effect emergency responses, not only to these facilities, but also through the area to other sections of the city. Alternative response routes as well as CAD generated traffic congestion reports should be considered relative to other subjects such as pedestrians, bicycles, parking, and public bus transportation (e.g. Mystic Valley Parkway/Route 16 Station). On a temporary level, construction, bridge work, road detours, etc. and all other aspects of infrastructure disruption need to be addressed.

L-014-004

L-014-001

During preliminary engineering, further attention will be given to emergency access points throughout the corridor as the Project is constructed and operational. MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during the construction phase.

L-014-002

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-014-003

In many cases, when compared to the No Action condition, delay and congestion is being improved by the project through the optimization of signal timings and coordination of phasing. Traffic mitigation is proposed for any impacts to traffic circulation and flow that are caused specifically by the Proposed Project.

- **Air Quality**: Not applicable to the fire department.

L-014-005
- **Noise:** Noise mitigation with 6 foot to 12 foot possible walls. Access along these walls needs to be addressed.

- **Vibration:** Not applicable to the fire department.

L-014-006
- **Storm Water**: Possible overflow of storm water at discharge into Mystic River with pollutants, etc. is a serious concern.

- **Wetlands**: Not applicable to the fire department.

- **Fish, Wildlife, and Plants**: Not applicable to the fire department.

- **Parks and Recreation:** Not applicable to the fire department.

L-014-007
- **Visual environment**: Noise mitigations, walls, access, etc.

L-014-008
- **Historical and Archaeological Resources:** No historical and archaeological resources are affected except possibly the Middlesex Canal.

L-014-009
- **Hazardous Materials:** Permits will be required for any demolition. 21E forms and FP290 Forms may also be required.

L-014-010
Indirect and Cumulative Effects – Phase 1 College Avenue (2014), and Phase 2 Boston Avenue and Route 16 (2030).

L-014-011
NFPA Standard 130: Standards for Fixed Guideway Transit systems will be the main reference and within it a number of other NFPA guidelines according to the compartmentalized subjects.

Respectfully submitted,

Frank A. Giliberti, Jr.
Chief of Department

FAG:dh

CC: Mayor Michael J. McGlynn

Pedestrian and bicyclist safety in the vicinity of any of the station sites will be taken into consideration during preliminary engineering. Worker safety for MBTA employees as well as for emergency response personnel will be planned for in both the construction and operational phases. MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during the construction phase.

L-014-004

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

L-014-005

During preliminary engineering, MassDOT will coordinate with emergency response providers to plan for appropriate site and community access while the Project is constructed and operating.

L-014-006

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

L-014-007

Please see response to Comment L-014-005.

L-014-008

The historic Middlesex Canal is identified as an archaelogical resource in Section 4.15.3 and shown in Figure 4.15-10 of the DEIR/EA. This location is not within the Proposed Project area, and would therefore not be impacted by Green Line Extension to College Avenue Station.

L-014-009

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

L-014-010

Anticipated indirect and cumulative effects of the Project, including impacts on corridor transportation and traffic, growth, property values, land use, transit-oriented and economic development are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects.

L-014-011

All stations will be designed in accordance with NFPA Standard 130.

City of Medford

OFFICE OF HUMAN DIVERSITY & COMPLIANCE

DIANE L. MCLEOD
DIVERSITY DIRECTOR

City Hall - Room 214
85 George P. Hassett Drive
Medford, Massachusetts 02155

TEL: (781) 393-2501
FAX: (781) 393-2105
TDD: (781) 393-2516
dmcleod@medford.org

December 1, 2009

Secretary Ian Bowles
Executive Office of Energy and Environment
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA Number #13886
100 Cambridge Street
Boston, MA 02114

RECEIVED
DEC 2 2009
MEPA

Dear Secretary Bowles,

In my capacity of Diversity Director for the City of Medford I serve as A.D.A. Coordinator, as well as the formal liaison to the Medford Commission for persons with Disabilities. I recently reviewed the Green Line Extension Draft Environmental Impact Report, specifically focusing on the Ball Square, College Ave., and Mystic Valley Parkway Stations.

L-015-001

It is imperative that all Green Line Stations be in full compliance with 521CMR Sect. 18 and 28CFR Part 36 Sect. 10.3.1.
Beyond the stations, the path of travel to each station from various areas around the stations, access within the station, and access to and within various level changes, and from the platform to the rail cars are also crucial. Although the regulations are occasionally referenced in the report, there is absolutely no detail whatsoever in this report.

Issues

- Elevators - (minimum of two at each location?) no design information
- Accessible route to entry of building and at drop off areas not detailed with dimensions or slope
- Sidewalks – no width, cross slope, running slope, and in most cases no curbcuts, including where necessary, reciprocal curbcuts

L-015-001

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

- Unobstructed paths of travel outside and within each station not detailed
- Width of entrances, noting the specifications to show they are accessible and the width of turn styles, and fare transaction locations within each station not detailed
- There is no mention of the distance and/or gap from the platform to the rail vehicle (vertically or horizontally) or plates to fill that gap
- No mention of platform detectable warnings bands
- Outside areas covered from the harsh weather?
- Platform width is not designated with width or length criteria and there is no mention if any ramps are located anywhere in any of the structures at any point.
- No notation of detectable warnings at vehicular ways
- Plan shows no seating areas
- Compliant visual and audible announcements in platform and seating areas?
- Alludes to tactile/braille signage with no information given of placement or detail
- Clear width of escalators and tread design not noted
- Accessible Restrooms – no design

I find it impossible to review these plans and documents for access as there is little or no detail provided other the mention of access and/or a color coded picture that provided no actual detail for review. It is impossible for me to give an opinion on the compliant handicap accessibility of this project based on illustrations and statements of compliant intention.

I am requesting detailed site plans and specifications in order to complete my review.

Sincerely,

Diane McLeod
Diversity Director

CC: Michael J. McGlynn, Mayor
Lauren DiLorenzo, O.C.D.



MEDFORD POLICE

LEO A. SACCO, JR.
CHIEF OF POLICE

100 MAIN STREET
MEDFORD, MASSACHUSETTS 02155

COMMUNICATIONS: (781) 395-1212
GENERAL INFO.: (781) 391-6404
FAX: (781) 395-5177

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environment
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA Number #13886
100 Cambridge Street
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles:

I am respectfully submitting my concerns regarding the Draft Environmental Impact Report of the Green Line Extension Project into the City of Medford.

In short, there are many issues of concern regarding the environmental impact report as presented. I will summarize what I have been able to determine.

L-016-001 Construction: There is no mention in the plan regarding the size or scope of the individual construction sites. It is assumed that this will be left to the contractors to determine. Adequate notice must be provided to the police and fire departments, as well as public notification. It is assumed that there will be extensive road and bridge closures, detours, lane restrictions, etc. throughout the duration of the project. There was also no mention of how construction workers and equipment would be accessing the site or how emergency personnel would be able to respond in time of need. Also of concern are the parking requirements for the construction workers.

L-016-002 The reconstruction of the various bridges will cause a tremendous disruption of traffic throughout the surrounding neighborhoods and the entire Hillside and South Medford area. We know this from the relatively recent experience of reconstruction of all of the same bridges.

Quality Policing Through Community Involvement

L-016-001

Detailed construction plans will be developed in the next phase of the Project. Further attention will also be given to the safety of both MBTA employees and emergency response personnel during construction and operational phases. MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during the construction phase.

L-016-002

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

Intersections: Seventy-five (75) intersections throughout the project were studied. At least fifteen (15) of these are in Medford. Many of the intersections have greater than average crash rates, namely Mystic Valley Parkway/Rte 16 at Winthrop Street, Boston Avenue at Winthrop Street, Boston Avenue and Harvard Street. Three (3) intersections are on the State's current High Crash Location list: Mystic Valley Parkway/Rte 16 and Boston Avenue (ranking 412), Mystic Valley Parkway/Rte 16 and Winthrop Street (ranking 501) and Salem Street and High Street (ranking 659).

Five (5) signalized intersections studied in Medford are rated at Level of Service LOS E + LOS F or least efficient or failing.

Six (6) non-signalized intersections studied were rated at LOS E + LOS F. It was noted that the volume of traffic at these intersections far exceeded the physical capacity of the intersection.

L-016-003 | Intersection ratings for pedestrians at nine (9) intersections in Medford fell below average to failing PLOS D – F. However, any change to the pedestrian walk cycles will have an adverse effect on motor vehicle LOS increasing delays and vice-versa.

L-016-004 | Traffic Mitigation: A major concern that I have with the various proposed mitigation measures was the elimination of parking spaces which are necessary to keep the Hillside business district vibrant.

Parking Mitigation: The report states that they conducted a limited parking inventory within 500 feet of the proposed stations. This is not large enough. It further states that a majority of parking spaces in the vicinity of Tufts University are regulated by parking permit for use by faculty, staff and students. This is inaccurate unless it is referring to the campus property itself.

L-016-005 | The report forecasts a need to accommodate 200 park and ride patrons who would drive to the proposed Mystic Valley Parkway Station. However, if that is not included in the project, the result would be the overflow onto nearby residential streets, creating additional problems.

L-016-006 | Drop-off and pick-up areas were not adequately addressed.

L-016-007 | Parking mitigation needs to be addressed early in this project. It must be determined what will be allowed as public parking and what will be permit only parking. A major concern is the loss of existing available parking spaces.

L-016-008 | Traffic Control Signal upgrade must be considered at the following locations: Boston Avenue and Harvard Street, Boston Avenue and College Avenue, Boston Avenue and Winthrop Street and Boston Avenue and North Street. The same must be done along Boston Avenue from the west side including Boston Avenue and Harvard Avenue and Boston Avenue and Arlington Street. Further consideration should be given to the Harvard Street corridor.

L-016-003

Increased pedestrian walk cycles will have an effect on motor vehicle LOS. However, these changes are required to ensure proper clearance times for pedestrians to cross the street and are regulated by the Americans with Disabilities Act and associated state regulations. Where possible, traffic signal timings were adjusted to minimize the amount of additional delay that would occur.

L-016-004

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

L-016-005

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout and access at Mystic Valley Parkway/Route 16, with attention given to neighborhood parking impacts. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-016-006

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed

L-016-009

I understand that it is believed that the majority of people that will utilize this extension of the Green Line will walk or bicycle to the station. This may be so, but it is only assumed. I believe that there will be a tremendous influx of motor vehicular traffic in the area on our roads which already receive a failing grade. This will put pedestrians in jeopardy and will further congest our neighborhoods in terms of traffic, parking and pollution.

Thank you in advance for your acceptance and consideration of my comments and concerns regarding the Green Line Extension and the Draft Environmental Impact Report.

Respectfully submitted,

Leo A. Sacco Jr.

Leo A. Sacco, Jr.
Chief of Police

CC: Mayor Michael McGlynn
City of Medford

LAS/ae

College Avenue Station and new Lechmere Station, respectively. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering.

L-016-007

The lack of available long-term parking at the Green Line Extension stations may encourage some motorists to park on local streets. Increasing parking enforcement or changing local parking restrictions to restrict commuter parking would be effective in reducing neighborhood impacts. As stated in FEIR Section 8.3, MassDOT will work with the affected communities to develop acceptable parking enforcement plans for the areas within one-half mile of the stations in order to limit potential impacts.

L-016-008

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

L-016-009

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for parking or passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Commitments, and in FEIR Chapter 4, College Avenue, these impacts will be minimized to the extent practical.

City of Medford
Engineering Division
City Hall – Room 300
85 George P. Hassett Drive
Medford, MA 02155
Tel: (781) 393-2474
Fax: (781) 393-2477

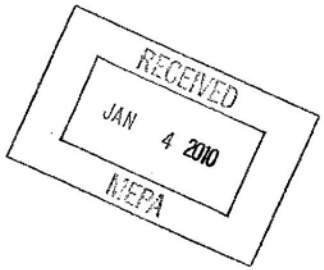
FACSIMILE

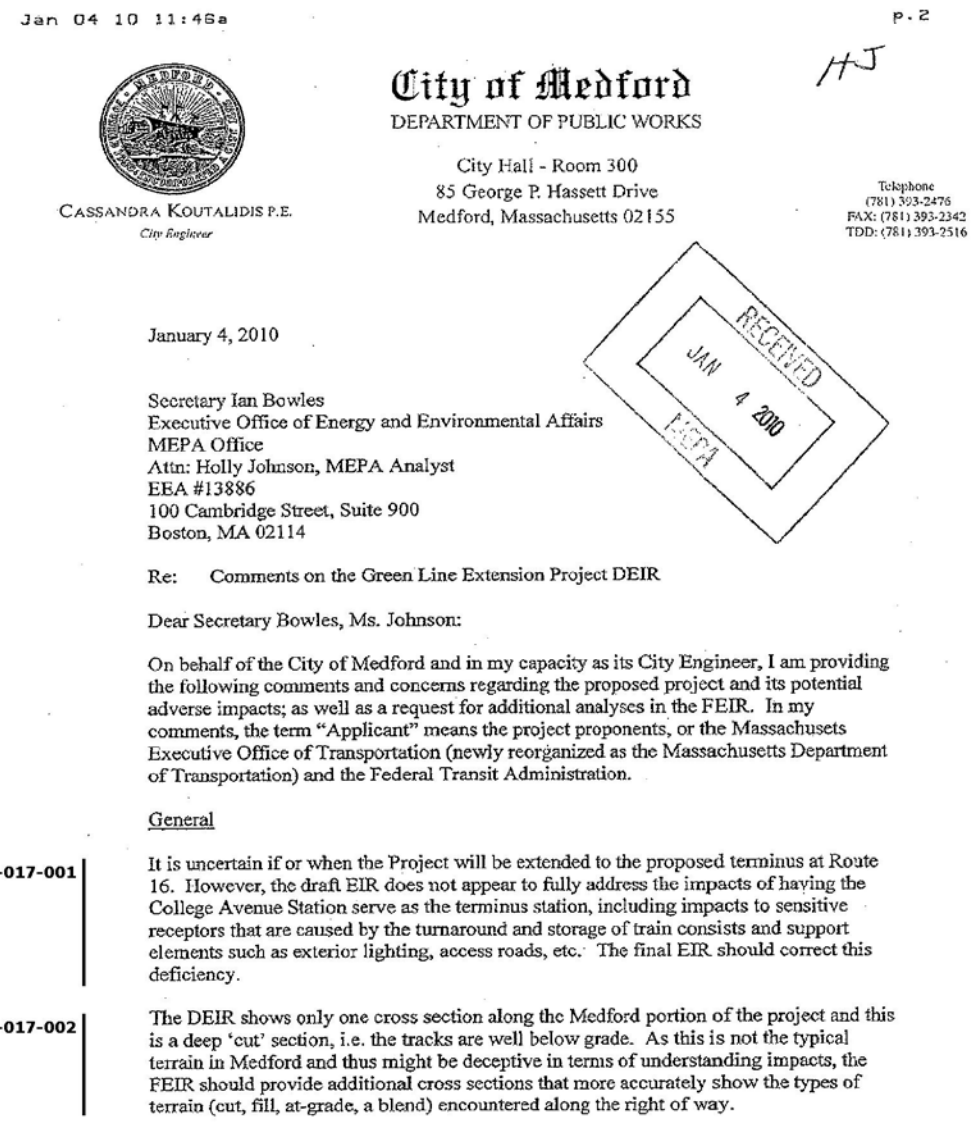
To: Holly Johnson	**Fax: 617-626-1181**
From: Cassandra Koutalidsi	**Phone: 781-393-2476**
Re: EEA # 13886	**Date: Jan 4, 2010**
cc:	**Pages (incl. cover): 5**

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Attached please find my comments on the proposed Green Line Extension project.
Should you have any questions, please feel free to contact me at the above phone number.

Thank You.





Jan 04 10 11:46a P.2

HJ

City of Medford
DEPARTMENT OF PUBLIC WORKS

CASSANDRA KOUTALIDIS P.E.
City Engineer

City Hall - Room 300
85 George P. Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2476
FAX: (781) 393-2342
TDD: (781) 393-2516

RECEIVED
JAN 4 2010
MEPA

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Comments on the Green Line Extension Project DEIR

Dear Secretary Bowles, Ms. Johnson:

On behalf of the City of Medford and in my capacity as its City Engineer, I am providing the following comments and concerns regarding the proposed project and its potential adverse impacts; as well as a request for additional analyses in the FEIR. In my comments, the term "Applicant" means the project proponents, or the Massachusets Executive Office of Transportation (newly reorganized as the Massachusetts Department of Transportation) and the Federal Transit Administration.

General

L-017-001 It is uncertain if or when the Project will be extended to the proposed terminus at Route 16. However, the draft EIR does not appear to fully address the impacts of having the College Avenue Station serve as the terminus station, including impacts to sensitive receptors that are caused by the turnaround and storage of train consists and support elements such as exterior lighting, access roads, etc. The final EIR should correct this deficiency.

L-017-002 The DEIR shows only one cross section along the Medford portion of the project and this is a deep 'cut' section, i.e. the tracks are well below grade. As this is not the typical terrain in Medford and thus might be deceptive in terms of understanding impacts, the FEIR should provide additional cross sections that more accurately show the types of terrain (cut, fill, at-grade, a blend) encountered along the right of way.

L-017-001

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

L-017-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. The mitigation measures required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. Areas where these mitigation measures would be implemented are not necessarily shown in sketches within the DEIR/EA or FEIR. The DEIR/EA and FEIR include conceptual Project designs. Designs for all project elements will be refined during the Project's preliminary engineering stage.

Jan 04 10 11:46a p.3

Green Line Extension Comments
Page 2 of 4

L-017-003 It is also requested that, in early Spring of 2010, the Applicant provide access to the Right of Way for City technical staff. The preferred method would be via a Hi-rail trip with opportunities to stop at proposed station locations and other areas of interest.

Construction Staging and Sequencing

L-017-004 In general, activity for the new Green Line extension will be dictated by bridge reconstruction, alternate construction by-pass routes, pedestrian access, commuter rail service, freight rail service, access to commercial and residential areas, contractor work zone requirements, contractor lay down requirements, contractor access/egress requirements, temporary easement requirements, and Life Safety vehicular access. These are items, issues and concerns that need to be properly addressed during the initial planning and permitting stages. A more detailed study and investigation is warranted to further evaluate, understand, address, and make additional recommendations at this stage to fulfill the EIR requirements.

Bridge/Road Reconstruction

L-017-005 The two preferred alternatives involve the reconstruction of the Harvard Street railroad bridge and the College Avenue roadway bridge (Alternative 1, Medford Hillside) as well as, for Alternative 2A (Route 16), Winthrop and North Street roadway bridges. Though none of these bridges are proposed to be fully closed during construction, I am concerned about the inevitable shift in traffic from these streets to other streets in close proximity, and whether the surface condition and capacity of those nearby streets can accommodate the increased traffic. I request the Applicant investigate and identify possible detour routes for bridges that are proposed to be partially closed and identify traffic impacts and mitigation such as improving the existing roadway surface.

A second concern is the widening of these bridges and the subsequent impact to roadway approach grades; above and below-ground utilities; and driver/pedestrian safety. I ask that the Applicant address this concern in the final EIR, indicating the extent of roadway reconstruction work at each bridge and identifying/mitigating potential impacts to truck clearances, existing intersections and driveways within or near these extents. I am also
L-017-006 concerned about grade changes that could affect utilities (e.g. if the road is lowered at the
L-017-007 Harvard Street Bridge). Finally, any change in grade will affect sight distances and other driver/pedestrian elements (e.g. some senior citizens and these items do not appear to be adequately considered in the DEIR.

Temporary Easements/Laydown areas

L-017-008 Temporary easements are mentioned in the DEIR but not shown. The FEIR should indicate potential locations for temporary easements and construction lay down areas using similar projects as an example. Further studies need to be completed to develop additional typical construction staging sketches that will enable a further detailed discussion of the potential constraints and conditions to be encountered. Also addressed

L-017-003

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

L-017-004

During preliminary engineering, construction management plans will be developed and MassDOT will coordinate with local municipalities and emergency response personnel.

L-017-005

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

Affected bridges are described in DEIR/EA Section 3.7.2. Detour routes and emergency access during construction will be developed during preliminary engineering as part of the Traffic Management Plan. At least one bridge will need to be closed during construction (Medford Street). A temporary bridge may be able to maintain a single lane of traffic at the Broadway Bridge. For all other bridges, at least one lane will be maintained during construction. Pedestrian and vehicular access to abutting properties will be maintained at all times. Project bridge designs and construction staging plans will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during design and construction.

Jan 04 10 11:47a p.4

Green Line Extension Comments
Page 3 of 4

L-017-008

should be whether or not there are any potential contractor lay down areas available off-site. If it is determined that potential sites do exist, their locations should be identified in the EIR.

Storm water runoff and groundwater discharge

I concur with the Applicant's proposal to prepare a Storm Water Pollution Prevention Plan for both construction and operational activities, and for treatment prior to discharge to ground or surface waters. However, this is not enough. I have a number of concerns regarding storm water. These include:

L-017-009

- The collection of runoff and flooding on Harvard Street under the railroad bridge during most rain events, as caused by the low elevation of the railroad bridge and the corresponding concave profile of the road underneath. This adverse impact -- both to roadway safety and public health - must be mitigated as part of the Project. I request that the FEIR identify and explore solutions in this area such as collection/storage of storm water and release after rain events have ceased. In addition to investigating storage and release technologies, the FEIR should not limit itself to the roadway as the possible location for a storage tank but look at adjacent properties as well.

- Any pumping or discharge of groundwater to the City's already over-capacity stormwater system. Groundwater should be infiltrated on-site or routed through the MBTA's existing storm drainage system and discharged to the river.

- Any increase in impervious surface which results in an increase of storm water flow to our system. I request the FEIR evaluate whether the Project can commit to no net runoff to the City's storm drain system. If that is not possible, the Project must prevent any peak flows from entering said system.

- The preservation of the City's current storm water connections to the MBTA's existing drainage system, some of which, I understand, is discharged to the Mystic River via the rail right of way.

Existing and Proposed Utilities

L-017-010

The Applicant should identify any existing municipal utilities, such as water and sewer lines, that either cross beneath the tracks or are otherwise located within the Right of Way. I request that, as part of the track reconstruction and expansion, that the segment of pipes beneath the existing/proposed tracks be upgraded and set in casing pipe to allow future access for isolation (e.g. valves) and maintenance.

In the FEIR, the Applicant should identify any proposed water use beyond that mentioned for the train stations, such as any need for fire hydrants along the right of way.

L-017-006

MassDOT will coordinate with utilities providers to minimize impacts to existing utility lines. Utilities on bridges identified for reconstruction would be rebuilt with the bridges. Utility impacts due to modified street grades at bridges will be evaluated during preliminary engineering.

L-017-007

These issues are discussed in the DEIR/EA and FEIR at the appropriate level for the current design level. Additional attention to safe pedestrians and bicyclists facilities near stations, and for sight distance and ADA compliance will be given during preliminary engineering.

L-017-008

DEIR/EA Section 5.2 describes the Project's potential acquisitions. Temporary easement and contractor lay down areas will be determined during preliminary engineering. MassDOT will continue to evaluate opportunities to minimize these property impacts.

L-017-009

The issues cited would be addressed in preliminary engineering. The Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

Appropriate geotechnical and hydrogeologic studies will be undertaken as needed during preliminary engineering. Discharges of pumped groundwater, if needed, will be managed in accordance with regulatory

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Green Line Extension Comments
Page 4 of 4

L-017-010

Connections to our system for water supply and sewer discharge must meet City of Medford standards.

Roadway and sidewalk

L-017-011

In areas of proposed increased pedestrian and vehicular activity - such as the vicinity of the proposed drop-off area along Boston Avenue - I request the Project commit to not only sidewalk reconstruction but improvements to the roadway surface in order to accommodate the future flow of traffic.

Sincerely,
City of Medford, Ma

Cassandra Koutalidis, P.E.
City Engineer

Copy: Mayor Michael McGlynn, City of Medford
John Buckley, Medford DPW Commissioner
Lauren DiLorenzo, Director, Medford Office of Community Development

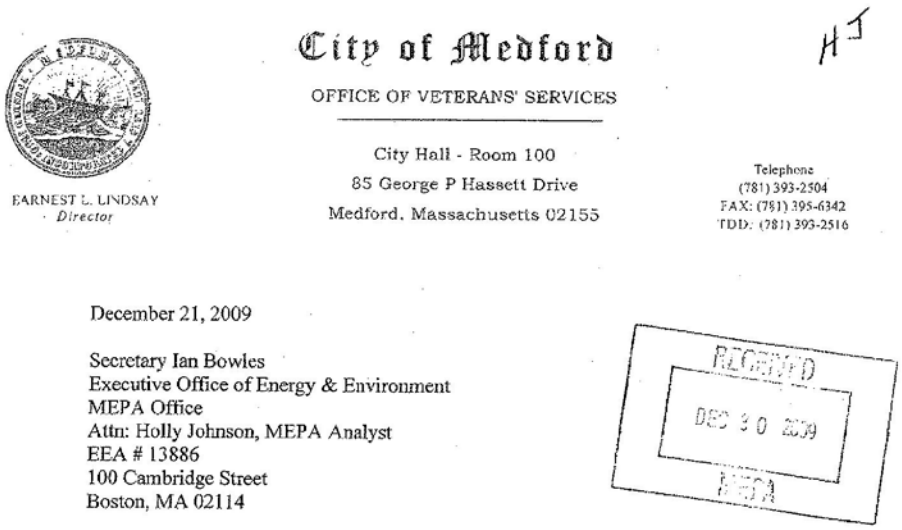
requirements and, to the extent feasible, within the existing drainage system.

L-017-010

MassDOT will coordinate with utilities providers to minimize impacts to existing utilities. Utilities on bridges identified for reconstruction would be rebuilt with the bridges. The existing MBTA drainage system will be reconstructed with proposed connections to the existing municipal drainage system. Project utility needs and utility compatibility will be evaluated during preliminary engineering.

L-017-011

The DEIR/EA and FEIR include conceptual station designs. Designs for each station will be refined during the Project's preliminary engineering stage. Improvements to the sidewalk and roadway in the immediate vicinity of the station are planned as part of station design and construction. The specific locations and measures are to be determined during preliminary engineering.



City of Medford

OFFICE OF VETERANS' SERVICES

H 5

EARNEST L. LINDSAY
Director

City Hall - Room 100
85 George P Hassett Drive
Medford, Massachusetts 02155

Telephone
(781) 393-2504
FAX: (781) 395-6342
TDD: (781) 393-2516

December 21, 2009

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Secretary Ian Bowles
Executive Office of Energy & Environment
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA # 13886
100 Cambridge Street
Boston, MA 02114

Dear Secretary Bowles,

As Director of Veterans Services for the City of Medford, I am in constant contact with the Veteran population, those with disabilities, as well as, living in senior housing complexes, throughout the city. I recently reviewed the Green Line Extension Draft Environmental Impact report (DEIR/EA) and I am particularly concerned with College Avenue, and Mystic Valley Parkway Stations/Rte 16.

L-018-001 Although this report states that all Green line stations meet the requirement of the American with Disabilities Act (ADA). I do not see any handicapped parking for those Veterans/ seniors who use wheel chairs. Nor do I see an indication of covered outside areas with seating, and in addition there seems to be no plan for parking at the route16 station. This combined with lack of ramps; unclear dimensions of the sidewalk (for wheelchair accessibility) and handicap railing for restrooms would present a problem.

L-018-002 In addition, since EOT in not presently studying the possibility of extending the Green line beyond the Mystic River into West Medford, which is densely populated, and has a significant amount of Senior & Veterans whom currently use the #95 Bus, which has an average weekly ridership of one thousand two hundred and fifty three (1,253) passages. My suggestion is that bus routes should be increased for ridership accommodation.

L-018-001

Only Lechmere Station will include station parking. In accordance with Americans with Disabilities Act, 1990 (ADA), parking will be provided at this station for customers with disabilities. The locations and number of these parking spaces will be defined during preliminary engineering.

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

The preliminary station access and platform designs are based on requirements and guidance provided by ADA, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for stakeholder involvement as the station designs are advanced.

L-018-002

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-018-003

For accessibility purposes there needs to be an in-depth site plan with the details of various platform widths , lengths, slopes, as well as, actual recorded or actual announcement for arrivals, and departures.

If possible, please provide an additional site plan for review and comments.

Respectfully,

Earnest L. Lindsay
Director of Veterans Service

CC: Michael J. McGlynn, Mayor
Lauren DiLorenzo, O.C.D. Director

mla

L-018-003

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

January 8, 2010

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Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Green Line Extension DEIR/EA

Dear Secretary Bowles:

I am writing to recommend prompt MEPA approval of MassDOT's Draft Environmental Impact Report (DEIR)/Environmental Assessment (EA) for the Green Line Extension as a Final Environmental Impact Review (FEIR) document; conditioned upon a written commitment from MassDOT to (1) eliminate the Yard 8 maintenance facility from consideration; (2) complete the design and engineering to the Route 16 terminus so that if resources are made available, the Route 16 terminus can be constructed at the same time as the rest of extension; and (3) complete the 100% design of the Community Path from Lowell Street to Northpoint, while assisting the City to secure funding for construction.

Closing the MEPA process now will allow the project to advance toward its mandated 2014 deadline, thereby ensuring the greatest accrual of environmental benefit to our community and the region.

In addition, I strongly urge that the MEPA certificate direct MassDOT to improve station design and location – with an emphasis on multimodal connectivity - during the preliminary engineering process and commit to a robust public process going forward.

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Introduction

L-019-001 I want to begin by thanking Governor Patrick, Secretary Mullan, former Secretary Aloisi, and the entire Green Line project team for the hard work that went into producing the DEIR. The transition to preliminary engineering represents a key milestone in this critical, but long delayed, regional transportation project.

Somerville does not just want the Green Line, it needs the Green Line. Our community is one of the densest in the nation, having been built around a vibrant transit network that was in place through the early part of the 20th century but subsequently dismantled. Today, we are burdened with a street network that hosts significantly more cars per square mile than any other metro Boston municipality and barriers created by two raised highways that divide our city. Further, freight and commuter rail lines crisscross our neighborhoods and a massive maintenance facility (the Boston Engine Terminal - BET) dominates our largest economic development district. All of these factors contribute to making travel across Somerville hazardous, significantly increasing our levels of air pollution, and severely inhibiting commercial development within our 160 acre Inner Belt/Brickbottom District.

Today, with only one rapid transit station in Somerville at Davis Square and access to two adjacent stops in Cambridge at Porter Square and Charlestown at Sullivan Square, 29% of Somerville residents use transit to commute to work. This percentage is as high as Brookline which houses 16 transit stations. The Green Line Extension represents a tremendous opportunity to significantly increase the ridership on the MBTA, a benefit felt both locally and throughout the entire region through reduced congestion and improved air quality.

That said, public transit generally, and the Green Line specifically, must be more than a means of transporting people. It must be designed to solve existing problems and anticipate future needs. Though an expanded light rail system will inherently improve air quality by reducing the region's long term over-reliance on cars, the environmental benefits of the project will be vastly increased through station design and siting that prioritizes bus, bike, and pedestrian connectivity and a robust public process before, during and after construction – including a prescribed system for mitigating noise and vibration impacts. The City's ongoing strategic land use decisions will further contribute to facilitate transit-
L-019-002 oriented development around the stations thereby generating new riders for the system and economic development for the Commonwealth. Accordingly, the City will work in partnership with MassDOT, the Department of Housing and Community Development, and other agencies to maximize the project's benefits.

This letter further outlines our proposed key elements of a successful Green Line Extension. An accompanying letter from Monica Lamboy, Executive Director of the Mayor's Office of Strategic Planning and Community Development, will provide a more detailed breakdown of our specific comments and requests.

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L-019-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

L-019-002

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Maintenance Facility

Throughout the planning process I have taken the position that, should MassDOT make a compelling case, Somerville would be willing to locate a second maintenance facility within our borders, provided that it would be designed and operated to meet criteria in three key categories:

- Quality of life - Any facility should not adversely impact the quality of life of residents in the area.
- Economic development - Any facility should not impede or deter future economic development in the InnerBelt and Brickbottom districts, including on the site of the facility itself; and
- Access - Any facility should not augment the existing access barriers between Inner Belt and Brickbottom and instead, should be designed to reduce barriers to the greatest extent possible.

I have also made clear that, as a matter of environmental justice, Somerville should absorb only those functions and facilities related to the extension project -- and that our community should not be further burdened by regional infrastructure that does not serve our residents and business community, unless mitigation measures are provided.

L-019-003 Yard 8 fails to meet each of the three criteria above and must be summarily eliminated from consideration as part of the Green Line Extension project. The Yard 8 location would immediately and severely degrade the quality of life for the district's only residents, occupy a prime development parcel, and create a permanent barrier between the Inner Belt, Northpoint, and Route 28. *Moreover, Yard 8's continued inclusion as the preferred alternative would indicate complete disregard for unified opposition to the site from Somerville and Cambridge public officials and community members.* Simply put, this would not bode well for the planning process going forward particularly in light of Somerville's stated willingness to accept a facility.

L-019-004 Indeed, while the City continues to believe that Mirror H is the best location for the facility, we acknowledge that Option L represents a real opportunity to meet both the operational needs of MassDOT and the City's key criteria. Once Mirror H or Option L is selected, the MassDOT should implement a vigorous and public planning and engineering process to ensure that the maintenance facility is designed to have minimal negative impact on our long-burdened community.

Station Location and Design

The Green Line's environmental benefits will only be fully realized if the project serves to eliminate noxious land uses and, where appropriate, promote high-density, high-value, transit oriented development. Stations located on major streets should have access from both sides of the street to increase visibility, encourage use and raise land values. The architectural design should be compatible with its environs yet highlighted as a distinctive landmark.

L-019-005 The Brickbottom/Washington Street Station, as proposed, is not properly situated or sized to meet the current and future needs of the Inner Belt and Brickbottom Districts and needs to be

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L-019-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

L-019-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-019-005

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The

L-019-005 significantly refined during the design process. First, it must have access points designed to meet the needs of the existing neighborhoods to the north, as well as the future development in the Inner Belt and Brickbottom Districts, which is anticipated to be between 7 and 10 million square feet. Second, it should be relocated to Washington Street to provide the best bus, pedestrian, and bicycle connectivity possible. The community commits to work closely with MassDOT on the strategic refinement and relocation of this station.

L-019-006 The proposed Union Square Station has the opportunity to significantly stimulate economic development in the Union Square and Boynton Yards areas. Attention must be paid during the design process to facilitate access directly into Boynton Yards to the south, as well as the heart of Union Square to the north.

L-019-007 At Gilman Square, only the minimum amount of the City's property (aka "Homan's Building") should be taken to facilitate the Green Line Extension. Our intent is to use the balance of the property for transit oriented development that will support transit ridership in the area. I am in the process of determining how to complete the transfer of land at no cost to the extension project.

Community Path & Multi-modal Connectivity

L-019-008 The Community Path Extension will provide a critical and safe link for bicyclists and pedestrians from surrounding neighborhoods and beyond. The existing path serving Davis Square receives tremendous use and has significantly increased ridership, offered air quality benefits and improved the lives of residents. It is imperative that MassDOT recommit to funding the 100% design of the path from Lowell Street in Somerville to North Point in Cambridge as a part of the Green Line Extension. The Path provides the most direct connectivity for bicyclists and pedestrians and its creation will help to support the system's success as well as the City's efforts to promote active and healthy transportation options. To this end, the City commits to providing the link between Cedar Street and Lowell Street and to working with MassDOT to secure funding to complete construction of the Community Path simultaneously to the Green Line Extension. Such an approach would both save money and improve the overall benefits of the project.

L-019-009 In order for MassDOT to achieve the full environmental benefits of the Green Line Extension, stations must be designed and located to facilitate multi-modal connections. In short, by enhancing these connections we will remove cars from our streets and make our community safer and healthier. Providing light rail alone will not accomplish this difficult task. We need a coherent and efficient

L-019-010 network to support bus, rail, bike, and pedestrian connections. The existing bus system should be analyzed and modified in conjunction with ongoing Green Line planning and construction. Bus routes and stops should be moved, added, or eliminated as needed to provide direct and efficient connections to the new rail station as soon as they become active. As stated above, the Community Path design should

L-019-011 allow for safe and easy access to stations for bicyclists and pedestrians. Finally, while Somerville supports bus pull-in areas, we request that the MEPA certificate recommend against MassDOT's current plan to provide "kiss n'ride" vehicle drop-off points and ensure that only the minimum amount of land

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Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

L-019-006

DEIR/EA Section 3.7.8 describes bus, pedestrian, and bicycle access at the proposed Union Square Station. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-019-007

DEIR/EA Section 5.2 describes the Project's potential temporary and permanent acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts.

L-019-008

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path

L-019-011 necessary is set aside for parking of maintenance vehicles.

Long Term Connectivity

L-019-012 Although the Commonwealth is planning for a specific project today, great care needs to be taken to ensure that future transit extensions are not precluded based upon current constraints or demand. In particular, the station design and location at the terminus of both spurs—Union Square and Route 16—should not preclude the potential to extend the Green Line to link with Porter Square or West Medford. Further, an additional future station in the vicinity of Boynton Yards must be anticipated, albeit to be constructed some time in the future.

Public Process

L-019-013 Although the DEIR process has provided a significant official public input component for the Green Line plans, it should not represent the end of proscribed community involvement. In order for stations to be successfully woven into our pre-existing urban fabric, as well as anticipated future development, neighbors and business owners must be consulted on specific plans for station design, access, location and construction. Both the efficiency and effectiveness of the planning process will be increased by proactive and predictable community engagement. Moreover, while the DEIR spells out projected noise

L-019-014 and vibration impacts, MassDOT should clearly define procedures for further mitigation if stated targets are not reached, or if construction produces unanticipated effects. Similarly, a procedure for determining compensation should be included for instances where secondary mitigation proves insufficient. Therefore, I respectfully request that MassDOT clearly define an ongoing proactive public process beyond the conclusion of the MEPA process.

Conclusion

The most serious environmental impact associated with the Green Line Extension is delay. The project is long overdue and risks failing to meet a court mandated deadline of 2014. Meanwhile, Somerville continues to suffer the costs of the Commonwealth's transportation infrastructure while reaping few of the benefits. We must now put the latest delay associated with the maintenance facility behind us and move the project forward.

L-019-015 I ask that EOEEA assist us in this historic effort by now issuing a certificate that accepts the DEIR as a final submission; provided a written commitment from MassDOT to eliminate Yard 8 as an option for the maintenance facility, ensure design and engineering of the entire Green Line to Route 16 and Union Square, and 100% design of the Community Path extension between Northpoint and Lowell Streets. The Secretary's certificate should provide overarching guidelines for the design/build process going forward, particularly in the areas of station location and design, multimodal connectivity, long range planning and community engagement.
I have attached prior correspondence on Green Line issues to this letter for inclusion in the DEIR review process.

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advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

L-019-009

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-019-010

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able at this point to commit to funding the construction of the Community Path. Station and path design will promote safe and convenient pedestrian and bicycle access to the stations.

L-019-011

The only Green Line Extension station that will provide parking is Lechmere Station. Drop-off and pick-up areas will be provided at at several stations. These will accommodate expected kiss-and-ride activity.

L-019-012

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

Green Line Extension DEIR
January 8, 2010
Page 6

Sincerely,

Joseph A. Curtatone
Mayor

Attachments:
L-019-016 | Letter to Steve Woelfel – September 12, 2008
L-019-017 | Letter to Secretary Cohen - December 9, 2008
L-019-018 | Letter to Secretary Aloisi - January 28, 2009
L-019-019 | Letter to Secretary Aloisi - May 12, 2009
L-019-020 | Letter from Somerville Board of Aldermen to Secretary Aloisi – June 22, 2009

Somerville Aldermanic 2009

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L-019-013

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-019-014

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. FEIR Chapter 8 describes next steps related to mitigation measures and post-construction mitigation.

L-019-015

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

L-019-016

Included as attachment to L-022, Somerville, City of, Office of Strategic Planning and Community Development. Please see Comments L-022-034 through L-022-053.

L-019-017

Please see Comments L-019-020 through L-019-022.

L-019-018

Please see Comments L-019-016 through L-019-019.

CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

January 28, 2009

Secretary James A. Aloisi, Jr.
Executive Office of Transportation
Suite 3170
Ten Park Plaza
Boston, MA 02116-3969

Re: Analysis of Green Line Maintenance Facility and Future Planning for City of Somerville

Dear Secretary Aloisi:

We sincerely thank you for the opportunity to meet and discuss the transportation opportunities and challenges faced by the City of Somerville. Over the past few years, the City has enjoyed a fruitful collaboration with EOT and the Massachusetts transportation agencies, particularly while planning for the Green Line and Urban Ring and reconstructing Somerville Avenue. With your assistance, we look forward to continuing and enhancing our relationship in the years to come.

I wanted to follow up with regard to two items we discussed in detail at our meeting. These include the City's technical review of the impacts of the proposed Green Line Maintenance Facility and the need for City-State collaboration on additional planning efforts in the Inner Belt/Brickbottom district and citywide.

Technical Review of the Proposed Green Line Maintenance Facility

From the beginning of discussions regarding a potential facility, I have taken the position that, should your office make a compelling case, Somerville would be willing to locate such a facility within our borders, provided that it would be designed and operated to meet criteria in three key categories:

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mayor@somervillema.gov

L-019-019

Please see Comments L-019-023 through L-019-026.

L-019-020

Included as attachment to L-020, Somerville, City of, Board of Aldermen.
Please see Comments L-020-007 through L-020-009.

1. **Quality of life** - Any facility should not adversely impact the quality of life of residents in the area.
2. **Economic development** - It should not impede or deter future economic development in the InnerBelt and Brickbottom districts, including on the site of the facility itself;
3. **Access** - It should not augment the existing access barriers between Inner Belt and Brickbottom (and instead, it could possibly reduce barriers);

As mentioned to you, although we acknowledge the thought and creativity used by your team to develop the most recent alternatives, our initial review indicates that EOT's preferred alternative would not meet the three criteria detailed above. Moreover, EOT's own analysis indicates that there are more cost-effective options. We have forwarded these concerns to your design team, together with our redesign based on EOT's alternative H, and are willing to offer any assistance needed to determine possible improvements or changes. Indeed, it is critical to identify an alternative, or redesign, that will satisfy a thorough environmental review process so that the extension project can remain on its 2014 timeline.

While I acknowledge that the entire Green Line Extension project must meet transportation and engineering objectives, I know you will agree that it is not in the Commonwealth's best interest to diminish the economic opportunity that would arise were the Inner Belt and Brickbottom districts developed to their full potential. That potential development, in turn, would actively support the Green Line Extension by providing thousands of additional daily riders.

Additional Planning Efforts

The City of Somerville recognizes the need to be flexible, cooperative and creative in working with the Commonwealth to address the transportation challenges faced in such a dense and diverse urban environment. I strongly believe that through coordinated and collaborative planning, we can collectively optimize the opportunity presented by the Green Line Extension and mitigate any potential negative impacts. To accomplish this in a timely and efficient manner, I directed my staff to develop specific projects and funding strategies designed to expand our planning efforts around the Green Line Extension. As I briefly described these initiatives to you, they involve:

L-019-021

- **Citywide Multimodal Transportation Plan and Modeling** – The proposed analysis will identify solutions to improve mobility by all modes of transportation today, coupled with the identification of future improvements needed to accommodate planned development throughout the city (taking into account the impacts of the Green Line Extension and the Orange Line Station planned at Assembly Square). An important deliverable will be a computer model allowing analysis of various development scenarios and their impacts upon the transportation network, citywide. This three-year program is estimated to cost $634,000.

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Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

L-019-021

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

L-019-022

- **100% Design for the Community Path from Cedar St. to North Point** – To date, the EOT has been clear that its responsibility is to prepare the conceptual design of the Community Path. However, we all recognize the Community Path extension along the proposed Green Line alignment has to be designed and built in lock step with the Green Line Extension. This is a complex endeavor that is inherently tied to the light rail project. Therefore, significant cost savings will be achieved by having the same consultants design both projects. The estimated design cost for this effort is $816,000.

As mentioned during our meeting, we have identified two earmarks available to the City of Somerville that we are willing to use for funding the above-mentioned $1.45 million programs. To match the City's commitment of $1,160,000, we are seeking 20% state matching funds, or $290,000 from the Commonwealth.

L-019-023

It is my sincere hope that we can continue to work together to resolve the challenges facing us in a mutually supportive manner. It is incumbent upon us to eliminate obstacles certain to generate community concern in order to ensure that the Green Line Extension remains on its 2014 timeline. To achieve that goal, we will need a high level of coordination and cooperation than can be best achieved by combining our efforts. We remain willing and committed to provide financial, technical, and other support to your efforts, in a way that will achieve expedited completion of the Green Line Extension.

Please let me know if you or your team needs additional details on our initiatives or if you have any general questions or concerns.

Sincerely,

Joseph A. Curtatone
Mayor

c: Congressman Michael Capuano, U.S. House of Representatives
Governor Deval Patrick
Commonwealth of Massachusetts Senator Anthony Galluccio
Commonwealth of Massachusetts Senator Patricia Jehlen
Commonwealth of Massachusetts Representative Denise Provost
Commonwealth of Massachusetts Representative Carl Sciortino
Commonwealth of Massachusetts Representative Timothy Toomey
Honorable Board of Aldermen, City of Somerville

ONE CALL...CITY HALL
3 1 1
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Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

L-019-022

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

L-019-023

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

Secretary Bernard Cohen
The Executive Office of Transportation
10 Park Plaza, Suite 3170
Boston, MA 02116

December 9, 2008

Re: Ongoing Analysis of Green Line Maintenance Facility & Future Planning for City of Somerville

Dear Secretary Cohen,

Thank you for your recent visit to Somerville. I appreciate the time you took to speak with us about the transportation opportunities and challenges faced by the City. With your assistance, we have enjoyed a long and fruitful collaboration with EOT and the Massachusetts transportation agencies. We look forward to continuing and enhancing our relationship in the years to come.

I wanted to follow up with regard to two items we discussed in detail at our meeting. These include the City's technical review of the impacts of the proposed Green Line Maintenance Facility and the need for City-State collaboration on additional planning efforts in the Inner Belt/Brickbottom and citywide.

Technical Review of the Proposed Green Line Maintenance Facility

From the beginning of our discussions regarding a potential facility, I have taken the position that, should your office make a compelling case, Somerville would be willing to consider locating such a facility within our borders, provided that it would be designed and operated to meet criteria in three key categories:

1. Economic development - It would not impede or deter future economic development in the Inner Belt and Brickbottom districts; including on the site of the facility itself.
2. Access - It would not augment the existing access barriers between Inner Belt and Brickbottom (and instead, it could possibly reduce barriers); and;
3. Quality of life - Any facility should not adversely impact the quality of life of residents in the area.

ONE CALL TO CITY HALL 311 SOMERVILLE
Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 665-0001 • Fax: (617) 625-3434 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

You will recall that I have repeatedly conveyed to EOT the City's priorities regarding the Inner Belt and Brickbottom areas and the crucial role that the Green Line Extension and its associated infrastructure will play in the future economic vitality of the area. I have also indicated that, as a matter of environmental justice, the City of Somerville should absorb those functions and facilities related only to the extension project. The Inner Belt has been historically burdened by poorly-designed transportation projects. Somerville should not be further burdened by infrastructure that does not serve its residents and business community.

As mentioned to you last week, although we acknowledge the thought and creativity used by your team to develop the most recent alternatives our initial review indicates that EOT's preferred alternative, as presented, would not meet the three criteria detailed above. We have forwarded these concerns to your design team and are willing to offer any assistance needed to determine possible improvements or changes. Indeed, it is critical to identify an alternative, or redesign, that will satisfy a thorough environmental review process so that the extension project can remain on its 2014 timeline.

While I acknowledge that the entire Green Line Extension project must meet transportation and engineering objectives, I know you will agree that it is not in the Commonwealth's best interest to diminish the economic opportunity that would arise were the Inner Belt and Brickbottom districts developed to their full potential. That potential development, in turn, would actively support the Green Line Extension by providing thousands of additional daily riders.

Additional Planning Efforts

The City of Somerville recognizes the need to be flexible, cooperative and creative in working with the Commonwealth to address the transportation challenges faced in such a dense and diverse urban environment. I strongly believe that through coordinated and collaborative planning, we can collectively optimize the opportunity presented by the Green Line Extension and mitigate any potential negative impacts. To accomplish this in a timely and efficient manner, I directed my staff to develop specific projects and funding strategies designed to expand our planning efforts around the Green Line Extension. As I briefly described these initiatives to you, they involve:

L-019-024

1. *Inner Belt / Brickbottom Master Plan* – This effort will result in a land use plan, a proposed transportation network, urban design concept, and market analysis that will paint a comprehensive picture of the area's significant development potential. The master plan will also include a preliminary estimate of infrastructure costs and recommendations on how to structure needed financing. This work will take 9 to 12 months by consultants already well-versed in the project and will cost an estimated $350,000. That said, we anticipate receiving actionable preliminary results within 60-90 days.
2. *Citywide Transportation Modeling and Action Plan* – The proposed analysis will identify solutions to improve mobility by all modes of transportation today, coupled with the identification of future improvements needed to accommodate planned development throughout

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(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

L-019-024

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

L-019-024

the city (taking into account the impacts of the Green Line Extension and the Orange Line Station planned at Assembly Square). An important deliverable will be a computer model allowing analysis of various development scenarios and their impacts upon the transportation network, citywide. This three-year program is estimated to cost $634,000.

L-019-025

3. *100% Design for the Community Path to North Point* – To date, the EOT has been clear that its responsibility is to prepare the conceptual design of the Community Path. However, we all recognize the Community Path extension along the proposed Green Line alignment has to be designed and built in lock step with the Green Line Extension. This is a complex endeavor that is inherently tied to the light rail project. Therefore, significant cost savings will be achieved by having the same consultants design both projects. The estimated design cost for this effort is $816,000.

As mentioned during our meeting, we have identified two earmarks available to the City of Somerville that we are willing to use for funding the above-mentioned $1.8 million programs. To match the City's commitment of $1,440,000, we are seeking 20% state matching funds, or $360,000 from the Commonwealth. To that end we have also initiated discussions with the Executive Office of Housing and Economic Development (EOHED) in order to identify potential sources.

L-019-026

It is my sincere hope that we can continue to work together to resolve the challenges facing us in a mutually supportive manner. It is incumbent upon us to eliminate obstacles certain to generate community concern in order to ensure that the Green Line Extension remains on its 2014 timeline. To achieve that goal, we will need a high level of coordination and cooperation than can be best achieved by combining our efforts. We remain willing and committed to provide financial, technical, and other support to your efforts, in a way that will achieve expedited completion of the Green Line Extension.

Please let me know if you or your team needs additional details on our initiatives or if you have any general questions or concerns.

Sincerely,

Joseph A. Curtatone
Mayor

Cc: Congressman Michael Capuano, U.S. House of Representatives
Governor Deval Patrick, Commonwealth of Massachusetts
Senator Anthony Galluccio, Commonwealth of Massachusetts
Senator Patricia Jehlen, Commonwealth of Massachusetts

ONE CALL • CITY HALL 3 1 1 SOMERVILLE

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(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

L-019-025

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

L-019-026

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

Representative Denise Provost, Commonwealth of Massachusetts
Representative Carl Sciortino, Commonwealth of Massachusetts
Representative Timothy Toomey, Commonwealth of Massachusetts
Secretary Daniel O'Connell, EOHED, Commonwealth of Massachusetts
Honorable Board of Aldermen, City of Somerville
Carrie Russell, Conservation Law Foundation

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Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

May 12, 2009

Secretary James A. Aloisi, Jr.
Executive Office of Transportation
Suite 3170
Ten Park Plaza
Boston, MA 02116-3969

Re: Green Line Maintenance Facility: Evaluation of "Mirror H" Alternative

Dear Secretary Aloisi:

Thank you very much for meeting with Congressman Capuano, our state delegation, and me on April 16th. I sincerely appreciate your willingness to consider our viewpoint on the future location of the maintenance facility. It speaks well of the process and our strong partnership that Somerville is willing to take the facility within its borders and that EOT is willing to consider a secondary site.

L-019-027

I wanted to take this opportunity to, once again, lay out the benefits of Mirror Scheme H as well as to offer a response to some of the counter-arguments raised by the Green Line project team. It is essential to note that we have presented our case to Cambridge City Manager Robert Healey and he raised no immediate objections to the Mirror H location.

Benefits of Scheme H - Simply put, Mirror Scheme H meets all three of our community's criteria for an acceptable site while also meeting EOT's own key engineering requirements:

- Somerville Criterion #1: No Negative Impact on Quality of Life – Mirror Scheme H moves the away from the district's only residents. Even assuming the future development of Northpoint, Scheme H would border (or be potentially submerged under) parking garages. Moreover, the facility could offer a strategic buffer between the future Northpoint neighborhood and the Boston Engine Terminal. In contrast, EOT's original proposal ("Yard 8") places the facility within feet of the Brickbottom Artists Association complex and, regardless of extensive and expensive mitigation would inherently degrade residents' quality of life.
- Somerville Criterion #2: No Negative Impact on Economic Development Potential – Mirror Scheme H requires less acreage in takings than EOT's proposal and would allow for the construction of a new, already permitted 196,000 sq. ft. building at 150 Inner Belt Road (projected to occur within two years). Moreover, the mere threat of EOT's current proposal has endangered the current art restoration and storage use that has recently revitalized 200 Inner Belt Road.

Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.somervillema.gov
mayor@somervillema.gov

L-019-027

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Again, even assuming the eventual build-out of Northpoint, Mirror Scheme H could provide a potential foundation for Northpoint's parking garages. Additionally, given that the Northpoint parcels in Somerville have neither been zoned nor permitted, the City would be willing to consider height and density bonuses in return for the incorporation of the facility.

- Somerville Criterion #3: Minimal Impact on Future Access to District – Mirror Scheme H takes advantage of existing transportation infrastructure and is located in such a way as to not further isolate the Inner Belt district. Moreover, the new location allows for easy connectivity between Inner Belt and Northpoint – thereby benefitting both districts. A Yard 8 location effectively permanently locks Inner Belt off from Brickbottom, Northpoint and McGrath Highway due to the increased costs and unattractiveness of the required long tunnels.
- EOT Key Engineering Requirement #1: Operations – EOT's report on Mirror Scheme H, authored by VHB/PB identifies two operational shortcomings with the City's proposed design but proposes several reasonable fixes "that would appear to eliminate these operational defects" (page 3). According to VHB/PB, with the fixes in place, Mirror Scheme H would gain the same operational level as the original Scheme H which received 20 points in VHB/PB's orginal report dated November 6, 2008. This score represented the second highest score of the five alternatives and was 1.5 points *higher* than EOT's ultimate proposed location at Yard 8.
- EOT Key Engineering Requirement #2: Cost – According to EOT, Mirror Scheme H costs $3 million less than the Yard 8 proposal. Moreover, this figure does not take into account the extensive mitigation (for Brickbottom and 200 Inner Belt Road) that would be required by a Yard 8 location. In addition, if EOT does not change locations, the City will seek concurrent construction of air rights development as well as a tunnel to connect Inner Belt and Brickbottom. *This level of mitigation could reach well over $100 million in additional costs to the project.*

EOT's Remaining Issues - EOT's secondary issues can also be readily addressed if the Mirror H alternative is selected. These include:

- Timeline: At our meeting, EOT project managers raised the concern of a possible short delay if the facility site was changed. The entire Somerville community, however, has recognized that the Green Line Extension, and its associated infrastructure, represents a once-in-a-lifetime opportunity to reverse decades of public transit neglect, vastly improve residents' quality of life, offer heavy and consistent ridership to the MBTA, and spur economic development. Surely it is worth the time to get this decision right.
- Northpoint Development: Based on the VHB/PB analysis, the potential impacts of Mirror H on Northpoint serve as the key deterrent to a change in location. However, for three key reasons, these concerns are not warranted.
  1. *Lack of zoning & Permitting:* Mirror H contemplates a building site that is entirely in Somerville. The Northpoint developers have no permits, nor zoning, for any buildings within the Somerville portion of the Northpoint site. If Mirror H becomes the selected site for the maintenance facility, Somerville would be inclined to not only offer the needed zoning, but would propose height or density bonuses as well.

Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.somervillema.gov
mayor@somervillema.gov

2. *Mitigates impact of BET:* A maintenance facility in the Mirror H location would not only allow for the envisioned parking structures but it would also serve as a buffer between Northpoint and the Boston Engine Terminal. I understand that noise emanating from the BET has long been an issue for nearby residents and a well designed facility in this location could act as a noise and visual barrier.
3. *Provides opportunity for air rights:* Unlike Yard 8, Mirror H provides a natural location for air rights development as an extension of Northpoint. Because the Mirror H site does not have the grade change and access challenges associated with Yard 8, Northpoint's parking garages could be built over existing rail lines and allow for better use of the Somerville parcels slated for development.

Once again thank you very much for working with me and for the people of Somerville. We appreciate your thoughtful approach to this issue and stress, once again, the remarkable willingness of our residents to accept a facility that will benefit multiple communities. We ask now that this willingness be rewarded with a sensible and sensitive siting of the maintenance facility.

Please call if you have any questions and I look forward to providing you with a tour of the district.

Sincerely,

Joseph A. Curtatone
Mayor

Somerville City Hall • 93 Highland Avenue • Somerville, Massachusetts 02143
(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3434 • www.somervillema.gov
mayor@somervillema.gov

Johnson, Holly (EEA)

From: John Long [JLong@somervillema.gov]
Sent: Friday, January 08, 2010 12:04 PM
To: Johnson, Holly S (ENV)
Subject: Somerville Board of Aldermen Green Line Extension EIR Comments
Attachments: Green Line DEIR Support Letter 2.doc

Hi, Holly,

Members of the Somerville Board of Aldermen wish the attached letter to be included in support of prompt MEPA approval of the MassDOT's Draft Environmental Impact Report/Environmental Assessment for the Green Line Extension.

I will forward a hard copy of the letter to you next week, with the Aldermen's signatures.

Please contact me if you have any questions. Thanks for your assistance in this matter.

-John

<<Green Line DEIR Support Letter 2.doc>>

==========

John J. Long, City Clerk
City of Somerville
93 Highland Avenue
Somerville, MA 02143
617 625-6600 x4110
FAX 617 625-4239
www.somervillema.gov
jlong@somervillema.gov

CITY OF SOMERVILLE, MASSACHUSETTS
BOARD OF ALDERMEN

January 8, 2010

RECEIVED
JAN 8 2010
MEPA

Ian Bowles, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

L-020-001 The Somerville Board of Aldermen is in support of prompt MEPA approval of MassDOT's Draft Environmental Impact Report (DEIR)/Environmental Assessment (EA) for the Green Line Extension. We support this document as the Final Environmental Impact Review (FEIR) document conditioned upon a written commitment from MassDOT to (1) eliminate the Yard 8 maintenance facility from consideration; (2) complete the design and engineering to the Route 16 terminus so that if resources are made available, the Route 16 terminus can be constructed at the same time as the rest of extension; (3) complete the 100% design of the Community Path from Lowell Street to Northpoint, while assisting the City to secure funding for construction.

Closing the MEPA process now will allow the project to advance toward its mandated 2014 deadline, thereby ensuring the greatest accrual of environmental benefit to our community and the region.

L-020-002 In addition, we strongly urge that the MEPA certificate direct MassDOT to improve station design and location—with an emphasis on multimodal

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www.somervillema.gov

L-020-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

MassDOT has committed to completing the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able at this point to commit to funding the construction of the Community Path.

L-020-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local

L-020-002 connectivity—during the preliminary engineering process and commit to a robust public process going forward.

Thank you for your attention to this critically important issue to our community.

Sincerely Yours,

s/John Connolly, President, Alderman At Large

s/Dennis Sullivan, Alderman At Large

s/Bruce Desmond, Alderman At Large

s/William Roche, Ward 1 Alderman

s/Maryann Heuston, Ward 2 Alderman

s/Thomas Taylor, Ward 3 Alderman

s/Walter Pero, Ward 4 Alderman

s/Sean O'Donovan, Ward 5 Alderman

s/Rebekah Gewirtz, Ward 6 Alderman

communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

CITY OF SOMERVILLE, MASSACHUSETTS
BOARD OF ALDERMEN

June 22, 2009

Secretary James A. Aloisi, Jr.
Executive Office of Transportation
Suite 3170
Ten Park Plaza
Boston, MA 02116-3969

Re: Green Line Maintenance Facility: Evaluation of "Mirror H" Alternative

Dear Secretary Aloisi:

Thank you very much for advancing the City's interests as they relate to both the Green Line Extension and the Community Path. We look forward to participating in the design process for these important projects over the upcoming weeks and months.

We wanted to take this opportunity to address one major outstanding issue associated with the Green Line – the proposed location of the maintenance facility. Since the Executive Office of Transportation released their preferred location ("Yard 8") we have heard an increasing chorus of protest from our constituents, particularly since the City developed an alternative proposal ("Mirror Scheme H") for a location within Somerville's borders.

L-020-003

Our review of the EOT's reports - "Mirror Scheme H" and the original "Alternatives Analysis" – indicates quite clearly to us that Mirror Scheme H scores higher than Yard 8 in the criteria identified by the EOT. Moreover, as the legislative body charged with overseeing land use in the City of Somerville, we dispute the EOT's significant markdown of Scheme H based upon its impact on the future, and uncertain, Northpoint development.

Mirror Scheme H vs. Scheme H – According to the EOT's review of Mirror Scheme H, the City's proposal had a number of operational defects. In the course of the review, however, the EOT's consultants "identified a set of modifications to Mirror Scheme H that would appear to eliminate these operational defects (page 3). The report then turns its analysis to the Original Scheme H: "Nevertheless, even with these modifications, the Mirror Scheme H Modified would still have the shortcomings of the Original Scheme H, shortcomings that caused EOT to eliminate Original Scheme H from further consideration." *This Board of Alderman's review of the EOT's own analysis, however, finds that Mirror Scheme H outscores Yard 8 in four out of five categories:*

1. Operational Criteria - Based on the EOT's seventeen operational criteria, Scheme H earns 20 points and Yard 8 earns18.5 points (page 69).

L-020-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

2. **Property Impacts** – Scheme H requires 5.3 acres of taking and Yard 8 requires 6.2 acres of taking (page 70). Moreover, Yard 8's taking would eliminate a key development parcel adjacent to 200 Inner Belt and disrupt the current sensitive art restoration uses at the existing building. Scheme H would not require taking "any developable lots (page 70).
3. **Cost and Constructability** – Scheme H was estimated to cost $16 million less than Yard 8 (page 71).
4. **Compatibility with Other Transportation Proposals** – Scheme H accommodates the three most important transportation proposals in the vicinity of the Inner Belt (Community Path Expansion, Urban Ring, and Fitchburg Line Realignment at Red Bridge, page 72). Scheme H would not allow for a North-South Rail Line Portal at Fitchburg (a project that the Commonwealth no longer officially supports) or for the expansion of the BET (a project that the City strongly opposes). Yard 8, on the other hand, would require alignment modification to accommodate the Urban ring (a project supported by both the Commonwealth and the City).
5. **Compatibility with Land Use** – Based on the EOT's seven land use criteria, Scheme H earns 10.5 points and Yard 8 earns 13 points (page 74). This Board of Aldermen, however, strongly opposes the EOT's scoring and allocation system. Yard 8 loses only two points for its impact on Brickbottom residences. As you are aware, the Brickbottom Artist Building is one of the oldest living and working artist colonies in the country and represents the only residences in the vicinity of the proposed maintenance facility. Scheme H, on the other hand, loses six points based on its proximity to the proposed Northpoint development. Northpoint is neither zoned nor permitted in Somerville and the existing master plan, approved only by Cambridge, calls for parking garages adjacent to the Scheme H site. Given these facts, the Board of Aldermen seeks a re-evaluation of the Yard 8 site in terms of land use.

Once again thank you for your work on behalf of the people of Somerville. We appreciate your thoughtful approach to this issue and stress, once again, the remarkable willingness of our residents to accept a facility that will benefit multiple communities. We ask now that the Yard 8 proposal be reconsidered and that the EOT accept the alternative of Mirror Scheme H.

Sincerely,

President Walter F. Perio, Ward 4 Alderman

Vice President John M. Connolly, Alderman-at-Large

Dennis M. Sullivan, Alderman-at-Large

William A. White, Alderman-at-Large

Bruce M. Desmond, Alderman-at-Large

William W. Roche, Ward 1 Alderman

Maryann M. Heuston, Ward 2 Alderman

Thomas F. Taylor, Ward 3 Alderman

Sean T. O'Donovan, Ward 5 Alderman

Rebekah L. Gewirtz, Ward 6 Alderman

Robert C. Trane, Ward 7 Alderman

William A. White, Jr.
Alderman at Large, City of Somerville
16 Browning Rd.
Somerville, MA 02145

Phone (617)625-2600
Fax (617)776-7011
E-mail william.a.white@verizon.net

RECEIVED
JAN 8 2010
MEPA

Ian Bowles, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

The following are my comments with respect to the MassDOT's Draft Environmental Impact Report (DEIR)/Environmental Assessment (EA) for the Green Line Extension. I am in overall support of the Green Line Extension but do have some concerns with the DEIR.

L-021-001

The Yard 8 maintenance facility should be eliminated from consideration. I previously expressed my view at the public hearing on November 18, 2009, that the proposed Yard 8 maintenance facility would have serious fiscal consequences because of its impact on the City's proposed development of the surrounding area, including the Brick Bottom/Inner Belt area. In a nutshell, the proposed location would effectively isolate the Brick Bottom/Inner Belt area from Route 28 and would preclude the construction of a normal street grid for the area with connections to Route 28. The noise that would be generated from the Yard 8 location presents serious health and quality of life issues for the existing residents of the neighborhood. It would also discourage the development of additional housing in the surrounding area since it is unlikely people would want to move into residences near a maintenance facility. One purpose of the Green Line is to promote transit oriented development in Somerville. Such transit oriented development would include a mixed use of office, retail and housing with open space. As discussed above, the location of the maintenance facility in Yard 8 actually would thwart transit oriented development in much of the Brick Bottom/Inner Belt area. Therefore, the location of the maintenance facility in Yard 8 is contrary to one of the most important purposes of the Green Line Extension. The economic cost to Somerville far outweighs any possible benefits. The alternatives to Yard 8 that are included in the DEIR make much more sense when judged on their economic and environmental impacts to the surrounding area.

L-021-002

L-021-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-021-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

L-021-003
L-021-004

I also believe that the Route 16 terminus should be constructed at the same time as the rest of extension and that MassDOT should complete the 100% design of the Community Path from Lowell Street to Northpoint, while assisting the City to secure funding for construction.

I also join in the sentiments expressed by the Mayor and my colleagues on the Somerville Board of Aldermen in their comments sent to you.

Thank you for your consideration of these comments.

Very truly yours,

William A. White, Jr.

L-021-003

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

L-021-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

CITY OF SOMERVILLE, MASSACHUSETTS
OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT
JOSEPH A. CURTATONE
MAYOR

OFFICE OF THE EXECUTIVE DIRECTOR

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January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Comments on DEIR for Green Line Extension from:
Office of Strategic Planning & Community Development (OSPCD)
City of Somerville

Dear Secretary Bowles:

L-022-001 Along with Mayor Curtatone, I am writing to recommend prompt MEPA approval of MassDOT's Draft Environmental Impact Report (DEIR)/Environmental Assessment (EA) for the Green Line Extension as a Final Environmental Impact Review (FEIR) document; conditioned upon a written commitment from MassDOT to (1) eliminate the Yard 8 maintenance facility from consideration; (2) complete the design and engineering to the Route 16 terminus so that if resources are made available, the Route 16 terminus can be constructed at the same time as the rest of extension; and (3) complete the 100% design of the Community Path from Lowell Street to Northpoint, while assisting the City to secure funding for construction.

L-022-002 In addition, I strongly urge that the MEPA certificate direct MassDOT to improve station design and location – with an emphasis on multimodal connectivity - during the preliminary engineering process and commit to a robust public process going forward.

As Mayor Curtatone has repeatedly stressed, the Green Line must be designed to solve existing problems and anticipate future needs. Although an expanded light rail system is certain to improve air quality by reducing the region's long term over-reliance on cars, the environmental benefits of the

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L-022-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. The limits of the path were predicated on the connections to NorthPoint being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line

project will be vastly increased through sensitivity to connections to the neighborhoods and ongoing public involvement to refine the design as it moves forward.

This letter will provide a detailed breakdown of our specific comments. The comments are structured to highlight the mandate from the EENF Certificate, summarize how the issue is treated within the DEIR, and provide the City of Somerville's response to the topic.

I. Maintenance Facility

- *EENF Certificate Requirement:* Requires the study of a combined Boston Engine Terminal (BET)/Green Line Maintenance Facility and the evaluation of Yard 8 in an effort to avoid, mitigate, and minimize negative impacts (EENF page 9, paragraph 2).

- *DEIR Submission:* An unchanged Yard 8 remains MassDOT's preferred alternative, however, the DEIR indicates that additional study will be conducted on two locations, Option L and Mirror Scheme H, which abut the Boston Engine Terminal (DEIR, Vol. 1, page ES-22, paragraphs 3 & 4).

L-022-003

- *City Response:* Yard 8 does not meet any of three basic criteria (quality of life, transportation access, economic development) developed by the City and would clearly block essential future connections between Inner Belt, Brickbottom, and Route 28. The location simply does not allow for the avoidance, mitigation, or minimization of negative impacts as is required in any environmental review certificate. Moreover, unified opposition to the location in the form of expected litigation would delay the project and jeopardize New Starts funding.

  Therefore, Yard 8 must be eliminated from consideration and replaced by Mirror Scheme H or Option L. Although Mirror Scheme H meets all of the City's criteria as proposed and remains the City's preferred alternative, Option L will also prove acceptable to the City, provided some additional design changes are incorporated to meet MEPA's requirement of avoiding, mitigating, and minimizing negative impacts. In particular, further consideration is needed regarding whether aspects of the Green Line maintenance facility can be combined with the BET.

  Following is a summary of our analysis of the three proposed maintenance facility locations. For more details on the comparison of engineering merits, operational efficiencies and proposed relative timelines, see the attached letters from the City.

  Yard 8 - Fails to meet all three of the City's criteria:

  - No Negative Impact on Quality of Life – Yard 8 would directly abut Brickbottom Artist Collaborative - the only residents in the area - and have negative sound and vibration impacts. Moreover; several stories of the artists housing would be blocked from light by the facility.

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Extension.MassDOT has and will continue to coordinate with the City of Somerville at appropriate milestones as the Project progresses.

L-022-002

In accordance with the Secretary's Certificate on the DEIR/EA, station designs and bicycle, pedestrian, bus and automobile access at each station will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public involvement in the next phases of the Project.

L-022-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering.

- No Negative Impact on Economic Development Potential – Yard 8 would eliminate a permitted project at 150 Inner Belt Road (190,000 square feet commercial building). Noise and vibration could additionally disrupt sensitive commercial operations at 200 Inner Belt. The mere threat of MassDOT's current proposal has endangered the current art restoration and storage use that has recently revitalized 200 Inner Belt Road. Yard 8 would occupy premier development parcels on the key border between Inner Belt, Brickbottom, and Route 28 corridor. In addition, City study suggests that air rights development at Yard 8 would be extremely difficult and cost prohibitive.

- Minimal Impact on Future Access to District – Yard 8 would permanently sever Brickbottom from Inner Belt and prevent a new street grid from being established, as the facility would be built up three to six feet higher than street level, on retained fill. This option would then require 300+ feet of tunnels to penetrate and provide connection between Inner Belt and Brickbottom, an inordinately expensive and ineffective option.

Mirror H - Meets all three of the City's criteria:

- No Negative Impact on Quality of Life – Mirror Scheme H moves the facility away from the district's only residents. Even assuming the future development of Northpoint, Scheme H would border (or be potentially submerged under) parking garages and not directly affect residents. Moreover, the facility could be designed to mute the impacts of the existing Boston Engine Terminal.

- No Negative Impact on Economic Development Potential – Mirror Scheme H requires less acreage in takings than MassDOT's other proposals and would allow for the construction of a new 190,000 sq. ft. building at 150 Inner Belt Road (projected to occur within two years).

  Again, even assuming the eventual build-out of Northpoint, Mirror Scheme H could provide a potential foundation for Northpoint's parking garages. Additionally, given that the Northpoint parcels in Somerville have neither been zoned nor permitted, the City would be willing to consider height and density bonuses in return for the incorporation of the facility. Such an approach conforms to the Commonwealth's stated goal of implementing smart land use planning and transit oriented development.

- Minimal Impact on Future Access to District – Mirror Scheme H takes advantage of existing transportation infrastructure and is located in such a way as to not further isolate the Inner Belt district. Moreover, Mirror H allows for easy connectivity between Inner Belt and Northpoint – thereby benefitting both districts.

Option L – Has strong potential, with limited modifications, to meet City's three criteria:

As currently proposed, Option L moves the facility further away from the Brickbottom Artists

Collaborative and onto lower valued parcels abutting the BET. Moreover, Option L's location does not preclude critical multimodal connections to be established between the Inner Belt, Northpoint, Brickbottom and Route 28 and it allows for a better alignment of the Community Path. In addition, according to MassDOT, the operational benefits of Option L exceed those of its alternatives, and would allow for more efficient Green Line service. We recommend that the design for Option L be revised to:

- **Plan for future air rights developments:** Based upon its location, Option L has the potential to allow for air rights development and, indeed, would provide an ideal location for a future parking garage built above the facility. It will be important for the ongoing design efforts to plan for air rights development so that it can be easily facilitated in the future.

- **Share parking with BET** – Somerville has limited land for economic development. Throughout the City, the Board of Aldermen is rezoning properties to require structured parking instead of surface lots which are inefficient uses of land. To this end, the 100 surface parking spots for the exclusive use of the Green Line Maintenance Facility should be eliminated and any short-term surface parking should be shared with the adjacent BET. If the existing BET parking lot was re-striped for maximum efficiency and shift changes between the BET and Green Line facility were coordinated, we are confident that sufficient space would exist to meet the needs of both facilities.

- **Move storage tracks away from developable areas and toward BET:** At present, there are two areas proposed for storage tracks, one of which is relatively close to the Brickbottom Artists Collaborative and is very close to prime future economic development areas. The storage tracks should be concentrated in areas closest to the BET and the amount of storage reduced to the number of trains needed to serve the Extension only.

- **Ensure storage tracks do not impact automobile/community path/Urban Ring Bridge:** Any storage must be designed so that it does not adversely impact the planned bridge which will provide a critical link between Inner Belt and Northpoint. Specifically, the width of the tracks should be minimized to limit the size of the span and make sure that the ramps leading up to the bridge do not create an additional barrier within the Inner Belt.

- **Minimize noise & vibration:** The City requests that noise and vibration effects be carefully mitigated in order to lessen the facility's impact on surrounding parcels. At present, there is limited development in the vicinity of Option L, but in the future, this will become a mixed use environment with between 7 and 10 million square feet of additional development.

The City understands that MassDOT has estimated the cost for Option L to be higher that other options, however, it is critical to recognize that the opportunity costs for Yard 8 in terms of lost economic development and future revenues to the Commonwealth and City of Somerville are far in excess of Option L. The 7 to 10 million square feet of new development anticipated in the

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Inner Belt/Brickbottom simply will not occur if Yard 8 is selected. This will result in worsened environmental conditions as this development will be required to move further away from the central core of the Boston Metro Area where transit is less accessible or outside of Massachusetts at a loss to all taxpayers.

Comments for All Maintenance Facility Alternatives

With the introduction of any maintenance facility in the area, it is critical that several elements be taken into account including:

L-022-004

- Properly size the facility to serve Extension only: While Somerville has gone on record with its willingness to accept another regional maintenance facility, the City and its residents should not be forced to accept the burden of storing trains cars in excess of the 38 vehicles (Appendix C: Green Line Support Facility Alternatives Analysis, page 1, paragraph 5) needed to serve the Extension. East Somerville is an environmental justice community that has already absorbed the negative impacts of the 23 acre BET. Adding storage beyond what is specifically required to facilitate the Green Line Extension will further adversely impact this community. Rail storage creates additional barriers to both future development and access points. In addition, it reduces the City's taxable land in an area slated for intense future development. Storage for the 80 cars proposed in the DEIR is far in excess of what is required to complete the project and each acre of land will diminish Somerville's ability to secure economic development and the associated tax base and jobs for the community. There is no justification for requiring Somerville to address longstanding storage needs of the entire Green Line system. Those needs should be addressed elsewhere.

L-022-005

- Centralize MBTA facilities at new maintenance building: Presently, the MBTA has considerable commuter rail uses scattered throughout the Inner Belt including office space and a significant amount of outdoor storage. Great potential exists to consolidate these new uses at the Maintenance Facility site, particularly at a combined BET/Option L site. If possible, the plans for the Green Line Maintenance Facility should include adequate office space to incorporate the MBTA commuter rail command center and the grounds of BET facility should be redesigned to move all the outdoor storage in the area so that it is next to BET. Finally, we request that any vacated MBTA parcels be provided to the City for future development.

L-022-006

- Improve access into Inner Belt and Brickbottom Districts: The addition of another layer of transportation infrastructure presents an opportunity for the Commonwealth to ease historic burdens that it has placed upon the Inner Belt and Brickbottom Districts. Currently, the only access to the Option L maintenance facility is provided for by "tubes" underneath the raised Lowell commuter rail line. These makeshift access points often cause back-ups or even stuck vehicles and are clearly inadequate for more intense use of the district. Opportunities include, but are not limited to: expanding and multiplying the access points beneath the Lowell Line,

L-022-004

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

L-022-005

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

L-022-006

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers site access, as well as land use and connectivity impacts and opportunities associated with each maintenance facility site alternative. The DEIR/EA and FEIR include conceptual Project designs; the process

L-022-006

moving the Lowell Line, or building bridges or tunnels out to Route 28 and Brickbottom.

L-022-007

- Ensure storage tracks are covered: In order to minimize the adverse impacts of the storage, including noise, vibration and visual appearance, it is important that the storage tracks be covered and screened properly. The appearance of the maintenance facility will directly impact the area's attractiveness to future business investment. In addition, by covering the tracks, the Green Line cars will be secured from vandalism and graffiti, thereby reducing future operating costs.

II. Station and Rail Location and Design

- *EENF Certificate Requirement:* Requires that the Extension maximize the public benefit and preserve the integrity and character of neighborhoods (EENF, page 2, paragraph 1). Moreover, the Extension should spur development and take into account local and regional growth plans. Similarly, communities should pass zoning to complement the Project (EENF, page 5, paragraph 5 & 6). The Certificate also acknowledges that the key themes running through extensive public comments included calls for enhanced land use planning, further analysis of station locations, clear identification of land takings, and mitigation of environmental impacts (EENF, page 2, paragraph 2). Finally, the Certificate calls for alternatives regarding service to Brickbottom/Twin City, Winthrop Street, and Route 16 (EENF, page 10, paragraph 2).

- *DEIR Submission:* MassDOT's submission provides analysis of each stations' affected environment (DEIR, Volume 1, Chapter 4), as well as 10%-level layout, plan, circulation, and elevation (DEIR, Volume 2 – Figures). The DEIR does not provide a full alternatives analysis of the Twin City or Winthrop Street stations.

L-022-008

- *City response:* It is difficult for the City to offer specific comments due to the preliminary nature of the station designs but it is clear that during the upcoming engineering stage modifications will be needed to respond to the key themes identified below. Therefore, the MEPA certificate should call for four overarching approaches to station design and siting, specific examples of which are provided below:

  - Station designs need to reflect local integrity and character – Somerville is a community made up of diverse and disparate neighborhoods, each of which has a distinct and vibrant character. However, MassDOT's 10% drawings represent an attempt to replicate near identical designs throughout the Extension while adapting for site specific access issues. The City does not wish to request designs that include expensive materials or delicate details, but ones that simply acknowledge the surrounding environment. Different neighborhoods will require different treatments. The Gilman Square station, for example, will be located on the triangle of land that currently hosts City Hall, the High School and the Library, and is defined by historic brick and stone structures. Union Square, alternatively, is a bustling and quirky central business district at the heart of the City's arts community zoned for intense development.

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for stakeholder coordination as these designs are refined is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

L-022-007

At this stage it is not financially feasible to cover the storage area. However, the design of the maintenance facility does not preclude future potential overbuild or air rights development.

L-022-008

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

L-022-008

The Lowell Street station will be located amidst a dense residential district, whereas the Ball Square station will support a commercial strip of small storefront businesses. The Washington Street station has the ability to redefine an existing railroad legacy and create a link with the abutting neighborhood. The City wishes to work with MassDOT to develop architectural designs that meet the MBTA's operational needs while also creating important neighborhood landmarks.

L-022-009

- **Station locations should maximize public benefit and support thoughtful transportation oriented development** – Stations need to have clear frontage and provide easy access from the surrounding neighborhoods. Furthermore, the location of stations and proposed construction staging areas should be strategically sited to eliminate unwanted uses and provide parcels for future smart-growth development. Significant opportunity for transit oriented development on or adjacent to stations exists at Gilman Square, Ball Square, and the Rt. 16 terminus. (A 199 unit TOD development has already been permitted at the Lowell Street Station.) Somerville pledges to be a partner in identifying those parcels where opportunity exists and to donate municipal land whenever possible. In exchange, the City would seek to receive the residual land left over after station construction or at least the opportunity to work with MassDOT on developing plans for the sites.

L-022-010

- **Station locations and design should anticipate future system expansion** - Full design and engineering should not only be completed to Route 16 but, as required by the EENF certificate, the feasibility of a second-phase Brickbottom/Twin City location should be determined so that the final design and construction of the Extension does not preclude an additional station in the future. Further, the Union Square station location should not prevent a future connection to Porter Square. At present, it appears that the alignment of the station would prevent it from continuing past Prospect Street. Lastly, the Route 16 terminus should be designed to facilitate potential extension to West Medford in the future and should show clear connections to the Minuteman and Alewife Brook paths.

L-022-011

- **Station design needs to acknowlege other transportation projects** - Although we recognize that planning and engineering has to acknowledge current constraints, accommodation needs to be made for changes to the existing landscape. The City is currently working with the Commonwealth to lower McGrath Highway and create a boulevard. If possible, the Green Line Extension should accommodate this beneficial change. Similarly, the rail lines through the Brickbottom district will need to be elevated or depressed in order to allow future connections between Inner Belt, Brickbottom and Cambridge. The City is in the process of analyzing the necessarily elevation and hopes to work with MassDOT as the engineering is further refined.

In addition to the three overarching principles, the City has significant specific comments related to one station:

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L-022-009

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

L-022-010

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

L-022-011

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

L-022-012

- Brickbottom / Washington Street Station location and design should be refined – The planned Brickbottom Station is the lynchpin for future development in the Inner Belt and Brickbottom Districts anticipated at between 7 and 10 million square feet of new development. Unfortunately, the design included in the DEIR is inadequate to address existing and future ridership needs in this area. First, given that the Secretary's certificate requires the Extension to spur development and take into account local and regional growth plans, the Brickbottom/Washington Street station should be moved to Washington Street. This will allow improved multi-modal access when compared to a station that is 240 feet away from this major arterial on a side street. In addition, it is essential that access be provided to the residential neighborhood to the north, the Inner Belt to the east and Brickbottom to the south and west. Consideration should also be made whether the platform length should be increased to facilitate the movement of the large numbers of riders who will access this station.

III. Multi-Modal Connectivity

- *EENF Certificate Requirement:* Stresses the need for MassDOT to provide clear access for bikes, pedestrians, and buses (EENF, page 10, paragraph 1). Existing bus routes should be examined and changes delineated (EENF, page 11, paragraph 3). Future projects, including the reconstruction of Route 28, Northpoint, a relocated Lechmere, the Community Path, and the Minuteman Path should all be taken into account during Green Line Planning (EENF, page 6, paragraph 4). Designing and building the Community Path along with the Green Line is critical (EENF, page 6, paragraph 5).

- *DEIR Submission:* Due to the only 10% drawings and unclear station elevations, multimodal access points for each station remain inconsistent or unclear (DEIR, Vol. 2 – Figures). Furthermore, MassDOT argues that no change in bus routes would be necessitated by the Extension (DEIR, Vol. 1, page 5-37, paragraph 3) and that the Community Path completion would not impact the number of bike-based commuters (DEIR, Vol. 1, page 5-37, paragraph 1). Finally, the DEIR commits only to "progressing the design of the Community Path" and explicitly states that construction of the Path is not intended to be part of the Green Line project (DEIR, Vol. 1, page 3-58, paragraph 2).

L-022-013

- *City Response:* An early priority for the preliminary engineering process should be to establish strong bus, bike and pedestrian (including ADA) connections, particularly by clearly incorporating the Community Path, strong connections between the path and the stations, and providing sufficient bike parking.

- Bus connections should be improved – Accommodating safe and easy transfer to the bus system is one means to ensure high levels of ridership for the Extension. Therefore, the location of bus stops should be the subject of considerable focus and attention. In terms of the bus routes themselves, MassDOT's definitive statement that a new light rail system

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L-022-012

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process. Based on the analysis conducted during development of the DEIR/EA, it was determined that only one station would be warranted in the vicinity of the Brickbottom neighborhood and Washington Street. This analysis can be found in Appendix A of the DEIR/EA.

L-022-013

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-022-013

with seven stops will not impact existing bus service simply defies logic. Further studies should be undertaken and if data show a need, MassDOT should be prepared to coordinate bus reroutings, additions or eliminations in advance of the Extension completion. The City is very willing to work with MassDOT on the re-routing and is currently collaborating with MassDOT and MIT to analyze the bus routes. In addition, all kiss n'ride design elements planned in Somerville, with the exception of Rt. 16, need to be eliminated as the City has no desire to encourage auto drop off at the stations. Instead, the kiss n'rides could be converted to bus pull-ins to create the strongest and safest possible link.

L-022-014

- Explicit commitment to fully design and construct the Community Path along the Extension (NorthPoint to Lowell Street) is needed – Despite Secretary Aloisi's written commitment to complete design of the Path (Letter to Mayor Curtatone, Feb 11, 2009), the DEIR does not echo this obligation. Additionally, although the MEPA certificate need not require construction of the Community Path along with the Green Line extension, MassDOT should retract their statement that the Path is not intended to be part of the project. For cost-effectiveness, the Path should be constructed in conjunction with the Extension, with funding as part of the project or a combination of outside sources. Construction of the Path with the Extension is the most realistic and effective way for the Path to be completed. Additionally, an analysis should be done to see if construction of the path would improve the Green Line Extension's New Starts application and, if the Path's positive impact on ridership would strengthen the application, construction of the path should be included in the project. Past precedents of the Orange Line Southwest Corridor project and the Linear Path over the Red Line prove path construction to be a feasible and effective way of increasing multi-modal connections to the stations. Additionally, attention will need to be paid to the design of the path to ensure that it is very visible and intuitive for riders. At the 10% design stage, it is unclear how the path moves across the Green Line tracks from the Inner Belt to Brickbottom or how riders in the vicinity of the High School/Medford and School Streets will have access to the Gilman Square Station.

L-022-015

- Increased bicycle parking is necessary - The amount of bicycle parking presently described in the plans (270 spaces) will be completely insufficient for the expected number of bicyclists coming to the stations. The current 270 spaces will only serve approximately 1% of the expected ridership. Based on the present parking at Red Line stations, bike parking at 3-5% of ridership levels may be needed. A quick visit to the Davis Square Station where bicycles are locked to every possible pole, rack or tree provides a vivid picture of the demand for bicycle parking in Somerville, a community with a median age of 31.1 years. The stations should be redesigned to incorporate bike parking equivalent to approximately 5% of ridership at the Union Square, Route 16 and Lowell Street stations and 3% at the others. Bicycle parking locations should be as close to as possible to the entrances and in well lit and safe locations. Bicycle parking should be

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L-022-014

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

L-022-015

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

L-022-015 | covered if at all possible and racks should incorporate city standards.

III. Public Process

- *EENF Certificate Requirement:* Calls for strong proactive coordination between MassDOT, MBTA, citizens, cities and other stakeholders throughout planning, design, and construction, (EENF, page 1, paragraph 2) using Urban Ring planning process as a model (EENF, page 6, paragraph 2). Impacted areas targeted for noise, vibration, and construction mitigation should be identified and specific measures described. Commitments should be clear and responsible parties defined (EENF, page 13, paragraph 1 and page 14, paragraph 3).

- *DEIR Submission:* Although MassDOT documents an extensive public participation process to-date, as well as close coordination with staff and elected officials from impacted cities, no response is given to the Certificate's call for future proactive coordination. Potential noise and vibration impacts were projected for numerous sites along the Extension (DEIR, Vol. 1, Chapter 5). According to MassDOT, planned mitigation measures would prevent moderate and severe noise impacts and keep vibration effects below residential impact levels. Construction mitigation measures are also described in detail (DEIR, Vol. 1, Chapter 5 and 6).

- *City Response:* Community involvement and proactive public coordination should intensify as the Extension progresses and continue beyond the completion of the project.

L-022-016 |
- **Advisory Group structure should be developed and regular meetings scheduled** - A new project-wide Advisory Group should be convened and, if needed, an additional group developed to focus on maintenance facility planning and design. A regular meeting schedule should be established for an on-going two-way dialogue as issues and opportunities present themselves during the project's development, rather than calling ad-hoc meetings to present updated plans. Station area community meetings should be held before any further design and engineering take place.

L-022-017 |
- **A transparent and predictable system of adjudicating noise, vibration, and construction impacts should be defined** – A supplemental EIR document should include clearly delineated procedures for determining further mitigation or compensation if stated noise and vibration targets are not reached. Such a system should protect abutters from having to resort to legal options in the event of continued noise and vibration impacts.

L-022-018 | Once again, I thank you for this opportunity to provide the City's perspective on the Green Line Extension DEIR submission. We believe that a Certificate should be issued accepting the DEIR as the FEIR thus allowing the long delayed Extension to enter preliminary engineering, provided that MassDOT commits in writing to the elimination of Yard 8, and the complete design of the Green Line to Route 16 and the Community Path from Lowell Street to NorthPoint in Cambridge. Our other requests can be incorporated into a short supplemental document or the engineering process

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L-022-016

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

L-022-017

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

L-022-018

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

L-022-018 itself.

Attached please find prior correspondence related to the Green Line Extension for inclusion in the DEIR review.

Please do not hesitate to contact me at 617.625.6600 x.2510 or mlamboy@somervillema.gov if you have any questions.

Sincerely,

Monica R. Lamboy
Executive Director

Attachments:

Letter to Steve Woelfel, September 12, 2008
Letter to Steve Woelfel, December 30, 2008
Letter to Steve Woelfel, January 26, 2009

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CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT

September 12, 2008

Stephen Woelfel
Executive Office of Transportation
10 Park Plaza, Suite 3170
Boston, Massachusetts 02116

Re: **Public Comment on annual update and status report for transit projects required by 310 CMR 7.36 (2)(f) through (j)** – Conceptual designs for Green Line Stations

Dear Mr. Woelfel,

The City of Somerville would like to provide comment on the conceptual designs for the Green Line Extension running through Somerville to Medford. We understand that these designs are subject to change as the design process for the Green Line Extension moves forward and wanted to provide you with comments to contribute to the development of the next iteration of designs. A separate letter from Mayor Curtatone has been sent to you regarding comments relative to the proposed Maintenance Facility.

Overall Comments

L-022-019

1. **Bus Connectivity** – At all stations, adequate bus connections are critical to contribute to ridership and ensure that the disabled community can fully access the benefits of the extension. These routes will obviously affect the entire community in terms of bus service and will more directly impact businesses and residences in the immediate vicinity of the new stations. The City of Somerville would like to work closely with EOT on the development new routes or alternation of existing routes in response to the anticipated Green Line stations.

L-022-020

2. **Bicycle Parking** – As can be seen from Davis Square, many Somerville residents use bicycles to access mass transit. With the impending extension of the Community Path parallel with the Green Line Extension, we can anticipate that demand for bicycle parking will be significant. It is very important that sufficient bicycle parking be built into the design of every station.

L-022-021

3. **Kiss and Rides** – with the exception of the Route 16 / Mystic Valley Parkway station, we strongly believe that Kiss and Rides are not appropriate in an urban area such as Somerville.

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L-022-019

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

L-022-020

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

L-022-021

The only Green Line Extension station that will provide parking is Lechmere Station. Drop-off and pick-up areas will be provided at at several stations. These will accommodate expected kiss-and-ride activity. The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

L-022-021

It is our anticipation that the vast majority of riders from Somerville will be walking or bicycling to the stations. As an alternative, "bump outs" along the adjacent roadways for quick drop-off/pick-up could be provided, but we do not wish to see the extensive Kiss and Rides shown on the conceptual plans included in the plans.

L-022-022

4. **Parking** – with the potential exception of the Route 16 / Mystic Valley Parkway station, parking for riders is not appropriate in Somerville and should not be planned for.

Route 16 / Mystic Valley Parkway

L-022-023

1. **Terminus** – although the terminus of the Green Line Extension has not yet been determined, it should be recognized that the proposed station location is within Somerville and that a station in this location would provide service to many residents of West Somerville that presently do not have access to rapid transit. In particular, it would provide access to the future residents of the approximately 200 unit Capen-Conwell assisted living / senior affordable housing development.

L-022-024

2. **Pedestrian and bicycle connections** – accessibility in the vicinity of the station for cyclists and pedestrians is presently inadequate. We suggest that considerable attention be paid to this issue to ensure safe access to the station.

3. **Mystic River Plan** – the ongoing MAPC and DCR planning efforts should be consulted in relation to station planning in this area.

4. **Gateway to Mystic Valley** – the station will serve as a gateway to the recreational opportunities along the Mystic River and we recommend that space be set aside for an interpretive center that would include historic information and a map of paths, etc.

5. **Kiss and Ride** – this would be the single location in Somerville where a Kiss and Ride might be appropriate. However, we suggest that the proposed configuration should be modified to allow the entrance to the site at Broadway and exit at Mystic Valley Parkway. This would eliminate left turns from Mystic Valley Parkway and reduce potential pedestrian-vehicle conflicts. At a minimum, the entrance to/exit from the Kiss and Ride needs to be moved further away from the overpass to improve sight lines.

Ball Square

L-022-025

1. **Entrance** - the two-level entrance at this location is much appreciated as it would facilitate pedestrian traffic to the station from all directions.

2. **Kiss and Ride** - No rider parking or Kiss and Ride should be included at this location.

3. **Existing structures** – it is unclear what is intended for the existing structures on this. We believe that transit oriented development would be opportune at this location and, given their historic nature, retaining the existing structures should be strongly considered. We suggest

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L-022-022

With the exception of replacing the existing parking at Lechmere Station, no station parking is planned at any of the proposed Green Line Extension stations.

L-022-023

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-022-024

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

L-022-025

The DEIR/EA and FEIR include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. For safety reasons, the MBTA, the future owner and operator of the Green Line Extension, has required that this rapid light

Stephen Woelfel
September 12, 2008
Page 3

L-022-025

that the EOT and representatives of the City of Somerville and City of Medford meet to discuss how to facilitate development since city border runs through property.

Lowell Street

1. **Connectivity from Community Path** – we support the request for a lower level entrance directly from Community Path

2. **Platform location** – we would encourage you to place the platform as close to Lowell Street as possible for ease of access to all riders in this area.

3. **Switchback** – we understand that there will likely be a switchback next to VNA property to allow connectivity from the Community Path to Lowell Street. This should be shown on the plans and incorporated as part of the Green Line Extension project.

Gilman Square

1. **Homan's Building** – this building represents a key development site for the City of Somerville and only the absolute minimum area should be taken as part of the Extension project, if anything is needed. The parking lot also needs to be preserved for the building.

2. **Kiss and Ride** - No rider parking or Kiss and Ride should be included at this location.

3. **Size and elevation** - This station seems significantly larger than shown at other locations. The only entrance should be at the upper level off of Medford Street and not from the parking lot for the Homan's Building since this will be a development site.

4. **Connection with High School and Community Path** – We believe that direct access to the platform should be provided from the Community Path and Somerville High School because Medford Street access alone will be not sufficient for the key potential rider groups. High School students will be one of the key user groups for this station and their paths should be carefully considered in the planning effort to make sure they do not develop cut-through paths that are contrary to safety at this location.

5. **School Street** – Allowing direct access from School Street should be considered.

Inner Belt / Brickbottom

1. **Two stations needed** - Under full development scenarios, two stations are needed in the Inner Belt and Brickbottom areas therefore, planning for the Green Line Extension needs to include two stations even if one is not built until a later date when demand increases. Preliminary data shows the potential for 8 to 10 million square feet of development in this area; one station will be insufficient to meet demand.

2. **Kiss and Ride** - No rider parking or Kiss and Ride should be included at this location.

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mayor@ci.somerville.ma.us

rail transit corridor be entirely separated from vehicular, pedestrian, and bicycle traffic. This separation would not allow at-grade track crossing for pedestrians and/or bicycles at any point. Plans for Lowell Station and the Community Path connection will be further refined during preliminary engineering. The process for coordinating with the local communities during the design process for stations, trackways, and the Community Path is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

MassDOT has and will continue to coordinate with the Study Area cities, as well as state and local agencies, at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and local priorities.

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts.

L-022-025

3. **Access to station** - The planned station near Washington Street must have access from Joy Street and New Washington Street (i.e., east and west sides) due to the numbers of riders who will come from the existing neighborhoods as well as to serve future development.

4. **Washington Street location** - It is strongly recommended that the station be moved to Washington Street. As presently conceived, the station will not be visible from the key access point of Washington Street and is less accessible to existing neighborhoods than it should be. The fact that the parking lot owner on Joy Street has indicated an interest in selling to the EOT is not an adequate rationale for locating the station here.

Thank you for taking these comments into consideration as we move forward on the Green Line Extension project. I can be reached at 617-625-6600 x 2500 if you have any questions or concerns.

Sincerely,

MONICA R. LAMBOY
Executive Director

SOMERVILLE CITY HALL 311 SOMERVILLE
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(617) 625-6600, Ext. 2100 • TTY: (617) 666-0001 • Fax: (617) 625-3435 • www.ci.somerville.ma.us
mayor@ci.somerville.ma.us

CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT

December 30, 2008

Stephen Woelfel
Executive Office of Transportation
10 Park Plaza, Suite 3170
Boston, Massachusetts 02116

Re: Green Line Extension
Union Square growth projections

Dear Mr. Woelfel,

L-022-026

The purpose of this letter is to respectfully request that the Executive Office of Transportation and Public Works (EOT) include growth projections for the Union Square area in the ridership figures for the environmental review of the Green Line Extension. As you are aware, the City of Somerville has been working on a rezoning proposal for the Union Square and Boynton Yards areas in anticipation of the opening of a new Green Line station in Union Square in 2014.

The proposal was submitted to the Board of Aldermen (BOA) on October 23, 2008 and is presently under review by the Planning Board and the Land Use Committee of the BOA. We anticipate that the proposal will be approved in February 2009.

Rezoning Proposal

The proposed rezoning includes the mapping of several new districts. These include:

- Arts Overlay District (AOD) – will facilitate the retention and expansion of arts-related uses including artist live/work housing, art studios, galleries, theaters, etc. This zone provides a modest density bonus for arts-related uses. (Note that to be conservative we have not projected any growth specifically related to the AOD zone.)
- Corridor Commercial District (CCD) – will manage development along heavily traveled transportation corridors such as Somerville Avenue and Washington Street. This includes an increase in Floor Area Ratio (FAR) from 2.0 to 3.0, an increase in residential density, and a reduction in required parking.
- Transit Oriented Development Districts (TODs) – will encourage mixed-use transit-oriented development near transit connections and commercial squares. There will be four TODs ranging in height from 55 feet and 4.0 FAR (TOD 55) to 135 feet and 5.5 FAR (TOD 135). All of the TOD zones include an increase in FAR from the present

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L-022-026

In accordance with FTA transportation modeling guidance, foreseeable growth trends and specific permitted developments were included in the ridership projections.

zoning coupled with an increase in residential density and a significant decrease in required parking. These zones will be mapped along Prospect Street, in the Boynton Yards area, and at key locations along the Fitchburg Rail right-of-way such as the Target site and the Pat's Tow Lot site.

Public comment on the proposed rezoning has been supportive and especially cognizant of the potential benefits that transit oriented development will bring Somerville including increased commercial development and associated employment opportunities.

Attached please find the October 23, 2008 submittal to the Board of Aldermen, an update memo dated December 3, 2008, and a large scale map of the proposal. Please note that Attachment III of the October 23rd report contains a succinct table that specifies the differences between the new zones and the existing Central Business District (CBD) mapped in the study area.

Growth Projections

We have prepared growth projections at the sub-TAZ level to facilitate the Union Square Transportation Study that is currently underway, as well as for use in the environmental review of the extension. As you will see, we are projecting over 10 million square feet of net new space to be added to the Union Square and Boynton Yards areas within the next 30 years. As you will also note, the rate of construction prior to the station opening is considerably slower than construction anticipated afterward.

Although we do not know the exact breakdown between commercial and residential development, we have made estimates based on the existing and anticipated future character of the different sub-areas. Overall, we project that residential development will account for approximately 30% of the new space with commercial or light industrial uses constituting the balance. This will result in the construction of over 3,500 new housing units and over 23,000 new jobs. As you can imagine, this will contribute significantly to future ridership on the Green Line.

We are available to respond to any questions you may have. In addition, Howard Stein Hudson (HSH) has already initiated modeling based upon some of the figures we produced earlier this fall. We will be transmitting these enclosed projections to them shortly and I anticipate it will not take them long to recalibrate their model accordingly. We would be very happy to convene a meeting between your two organizations if you believe that would be helpful.

Attached please find a map of the sub-TAZ zones, an overview of growth by different zoning district, and additional information related to each sub-area. We can provide you with electronic copies of these spreadsheets if it would be helpful.

Relationship to Inner Belt / Brickbottom & Need for Additional Station

In addition to having this data included in the environmental analysis for the Green Line extension as it relates to the Union Square station, I am hopeful that you will acknowledge the relevance of these materials to two additional aspects of the extension project.

Stephen Woelfel
December 30, 2008
Page 3

L-022-027

First, while planning for the Inner Belt / Brickbottom areas remains at the master plan level, as opposed to zoning, the City of Somerville anticipates that the ultimate density in this area will be equal or greater to that planned for Union Square. I would strongly recommend that the EOT apply these densities to Inner Belt / Brickbottom and use this information to calculate future ridership in these two districts.

L-022-028

Second, as referenced in my September 12th letter, the City of Somerville seeks the inclusion of an additional station in this area – whether on the main line or on the Union Square spur. While we recognize that such a station might not be constructed during the current extension project, we believe that the identification of the location and proper alignment of the tracks to allow future construction is absolutely essential to accommodate the build out potential for these areas. Very real potential exists for tens of thousands of new workers to be coming to this quadrant of Somerville, along with several thousand new residents, all of whom will demand adequate rapid transit service.

**

L-022-029

I want to thank you in advance for incorporating this information into the analysis of the environmental impacts of the Green Line extension. As you can see from the proposed rezoning, the City of Somerville clearly sees the enhanced transit access as an opportunity to increase development within the city which will, in turn, increase ridership on the Green Line.

Please do not hesitate to contact me if you have any questions or concerns. I can be reached at 617-625-6600 x 2510 or mlamboy@somervillema.gov.

Sincerely,

MONICA R. LAMBOY
Executive Director

cc:
Wendy Stern, EOT
Clinton Beach, EOT
Kate Fichter, EOT
Mark Draison, MAPC
Barbara Lucas, MAPC
Jim Gallagher, MAPC
Carrie Russell, CLF
Scott Peterson, CTPS

Attachments:
1. Letter from Mayor Curtatone to Board of Aldermen - October 23, 2008
2. Memo from Monica Lamboy to Board of Aldermen – December 3, 2009
3. Union Square Rezoning Map – December 3, 2008
4. Sub-TAZ area map
5. Zoning Proposal by Category
6. Data by sub-TAZ area

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L-022-027

In accordance with FTA transportation modeling guidance, foreseeable growth trends and specific permitted developments were included in the ridership projections.

L-022-028

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions, such as a conceptual future station near the junction of the Medford and Union Square branches.

L-022-029

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

CITY OF SOMERVILLE, MASSACHUSETTS
JOSEPH A. CURTATONE
MAYOR

OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT

January 26, 2009

Stephen Woelfel
Executive Office of Transportation
10 Park Plaza, Suite 3170
Boston, Massachusetts 02116

Re: **Zoning Permits for 150 Inner Belt Road, Somerville, MA**

Dear Mr. Woelfel,

This letter is a follow up to our conversation a few weeks ago during which I informed you that 150 Inner Belt Road was in receipt of several zoning permits from the City of Somerville. I wanted to provide you with more detailed information and copies of the relevant board decisions.

Permitted Use

At present, 150 Inner Belt Road has a land use permit that would allow for construction of a 190,000 s.f. structure that is approximately 64 feet in height along with associated site improvements including surface parking, landscaping, and drainage, etc. Since the zoning permit has been accessed as a result of the construction of 200 Inner Belt Road, our legal counsel indicates that the property owner continues to have the authority to construct the second building and would just need to apply for a building permit to exercise that right.

Background

In March 2000 (Appeal #2000-06), 150-200 Inner Belt Road was permitted for two buildings, each totaling approximately 190,000 s.f. in size and 64 feet in height. The use was projected to be telecommunication businesses in 75% of the space. The remaining 25% of the buildings would be devoted to general office use. Site improvements included surface parking for approximately 335-400 vehicles, landscaping, and an underground storm water drainage system.

In November 2001 (Appeal #2001-66), the site was granted permission to change the use to biotechnology manufacturing and laboratory use. At the same time, the Applicants specifically wished to clarify that the second building did not need to be constructed to be in compliance with the requirements of the decision.

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Later permits in 2005 and 2008 allowed a change in use for 200 Inner Belt Road so that it could be used for wholesale storage for an arts storage facility. These permits did not affect the use of 150 Inner Belt Road, so the authorized use for 150 Inner Belt Road remains for biotechnology manufacturing and laboratory use.

Conclusion

L-022-030

The City of Somerville hereby requests that the EOT acknowledge the existence of the land use permits related to 150 Inner Belt Road as it continues to evaluate the relative merits of the potential sites for the Green Line Extension maintenance facility and storage. As can be seen, the selection of Yard 8 would result in the loss of an already-permitted 190,000 s.f. commercial structure.

Thank you for taking these comments into consideration as we move forward on the Green Line Extension project. I can be reached at 617-625-6600 x 2500 if you have any questions or concerns.

Sincerely,

MONICA R. LAMBOY
Executive Director

Enclosures

cc: Kate Fichter, EOT
David Mohler, EOT

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L-022-030

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

'ohnson, Holly (EEA)

From: dieckmannj@comcast.net
Sent: Friday, January 08, 2010 12:10 PM
To: Holly Johnson
Subject: RE: Green Line Extension Draft EIR (EEA #13886)

December 29, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,

The Belmont Citizens Forum (www.belmontcitizensforum.org) is supported by about 700 families in Belmont and neighboring communities who are concerned with protecting the environment, protecting open space, preserving historic and archeological resources, controlling the growth of traffic and improving pedestrian safety. A major project of the Forum is to develop a shared use community path from Belmont Center to Brighton Street in Belmont, where it will connect with the soon to be constructed Alewife to Belmont extension of the Minuteman Bike Trail (MassHighway has recently let a contract for the construction of this segment along with rebuilding of the Alewife to Davis Square linear park). The common denominator among the Forum's Belmont Center to Brighton Street path project, the MassHighway Alewife to Davis Square project and the Somerville Community Path is that they are all segmetns of the Mass Central Rail Trail. Together they will provide an off road route from Belmont Center into Boston (and eventually will connect to points further West along the MCRT route). The critical eastern section of the Mass Central Rail Trail is the Somerville Community Path that will bring this linear park to Cambridge, the Charles River and into Boston. Clearly, the way to build this last section is with the construction of the Green Line extension from Cambridge to Somerville and Medford.

Therefore, we have reviewed the Draft EIR for the Green Line extension. The citizens Forum wholeheartedly supports the design and construction of the Green Line extension but offer the following comments to insure successful extensions of both the Green Line and the Somerville Community Path.

O-001-001

- The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT. We understand that this design will be for the section from Lowell St. to Lechmere.
- The only way the Path can realistically and cost effectively be constructed is together with the Green Line construction. Therefore the Green Line and Community Path extensions will be designed and constructed as one project and described as such in the DEIR and Green Line planning documents

MassDOT should commit to working with the City and other State and Federal agencies to obtain the necessary funding for the construction of the Community Path extensions, including applying for Federal New Starts funding for applicable costs (The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop... may be eligible for FTA funding: http://edocket.access.gpo.gov/2009/E9-27240.htm)

There are many other reasons why these requests are reasonable and appropriate in addition to completing

O-001-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

the Mass Central Rail Trail:

- The Somerville Community Path will provide desirable off-road bicycle and pedestrian access to the stations, offering superior connections to the neighborhoods (like in Davis Sq.), thereby attracting more riders in a very cost-effective manner.
- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is in integral part of the station access.
- There are at least 2 precedents in the Boston area for community paths constructed and paid for by transit projects:
  - The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
  - The Southwest Corridor Path alongside and over the Orange Line

Thank you very much for considering these comments for the extension of the Green Line relative to the Somerville Community Path.

John Dieckmann

Vice-President

The preceding email was sent to the MEPA Office by the 175 people listed below:

Name	Date
Sharon Small	12/5/2009
Carrie Normand	12/5/2009
Lisa Gimbel	12/7/2009
Irene Glassman	12/7/2009
Marta Isajiw	12/7/2009
Kenneth Knoppik	12/7/2009
Ann Cawley	12/7/2009
Cecily Harwitt	12/8/2009
Christina Jones	12/8/2009
Jennifer Lawrence	12/8/2009
Meridith Levy	12/8/2009
James M. Nordlund	12/8/2009
Mary Regan	12/8/2009
Matt Shuman	12/8/2009
Kevin Silvey	12/8/2009
Matthew Cloner	12/8/2009
Elisabeth kelly	12/10/2009
Erica Schwarz	12/10/2009
Lauren Tulp	12/10/2009
Melissa McWhinney	12/10/2009
Colin Barr	12/10/2009
Matan BenYishay	12/10/2009
Suzanne Boucher	12/10/2009
Barbara Cassesso	12/10/2009
Ezra Glenn	12/11/2009
Jennifer hall	12/11/2009
Greg Hill	12/11/2009
Anneke Hut	12/11/2009
Nicholas Joseph	12/11/2009
Jake Wolfhart	12/11/2009
Ray Bookburn	12/11/2009
Katie Anthony	12/11/2009
Colleen Chaos	12/11/2009
Joan E. Loza Mobry	12/12/2009
Christiane Henker	12/12/2009
Maria F.	12/12/2009

Kate Selden	12/12/2009
Ingrid Peeters	12/13/2009
Lauren Bell	12/13/2009
Julia Petipas	12/13/2009
Kim Carter	12/13/2009
Ginger Geronimo	12/13/2009
Janine Lotti	12/14/2009
Suzanne DesRosiers	12/14/2009
Mark Sullivan	12/15/2009
Maura Schorr Beaufait	12/15/2009
Naomi Sobel	12/15/2009
Pru Chapman	12/15/2009
Laura Studley	12/15/2009
Jesse Purvis	12/15/2009
Stefanie Lynch	12/15/2009
Mara Vorhees	12/15/2009
Laura Slapikoff	12/15/2009
Marcy Barnes	12/15/2009
Naomi Slagowski	12/15/2009
Mark Sullivan	12/15/2009
Juliette Rooney-Varga	12/15/2009
Annie Silverman	12/15/2009
Eric Becker	12/16/2009
Michele Biscoe	12/16/2009
Alexandra Kaplan	12/16/2009
Gordon Jacobs	12/16/2009
Elizabeth Murphy	12/16/2009
Vanessa Rule	12/16/2009
Ceallaigh Reddy	12/16/2009
John Prance	12/16/2009
Justine Deutsch	12/16/2009
Muhammed Jargboh-Sillah	12/16/2009
Steve Laferriere	12/16/2009
Kate Jordan	12/16/2009
Jonathan Ralton	12/16/2009
Thais DeMarco	12/17/2009
Maureen Barillaro	12/17/2009
Liza Loveland	12/18/2009
John Resig	12/20/2009
Adam Chamberlain	12/21/2009
Sarah Thibodeau	12/21/2009
Thierry Jeanno Marcellus	12/21/2009
Simone DeSouza	12/22/2009

Aparna Das	12/22/2009
Tatiane Santos	12/22/2009
Eimy Bonilla	12/22/2009
Gregory Dennis	12/24/2009
Sara Krakauer	12/27/2009
Nora Chovanec	12/29/2009
James Wrigley	12/30/2009
Matthew Evans	12/30/2009
Christopher jeris	12/31/2009
Richie Eldridge	12/31/2009
Jessica Zeigler	12/31/2009
Nancy Bernhard	12/31/2009
Karen Gardner	1/1/2010
Amanda Rush	1/3/2010
Josh Wairi	1/3/2010
Alex Lessin	1/3/2010
Ian Thal	1/4/2010
Alyson Schultz	1/4/2010
Gail Fithian	1/4/2010
Jeff Reese	1/4/2010
Alison Cromer	1/4/2010
Kari Dyrdahl	1/4/2010
Richard Silva	1/4/2010
Peter heller	1/4/2010
Charles Olson	1/4/2010
Bill Cavellini	1/4/2010
Suzanne Bremer	1/4/2010
Laurie Goldman	1/4/2010
Nair Rocha	1/4/2010
Robert Waolfreys	1/4/2010
Trecia Reavis	1/4/2010
David Grogan	1/4/2010
Patty Camilleri	1/4/2010
Gladys Maged	1/4/2010
Jennifer Dorsen	1/4/2010
Ethan Gilsdorf	1/4/2010
Jack Melcher	1/5/2010
Ruth Ronen	1/5/2010
Christine Kim	1/5/2010
Jill Clarke	1/5/2010
Christopher Timmel	1/5/2010
Will Scarbrough	1/5/2010
Christopher Davis	1/5/2010

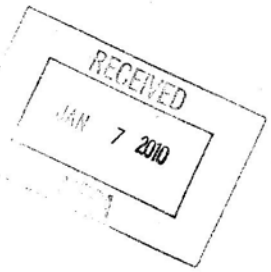
Sarah Rund	1/5/2010
Evelyn Rosenthal	1/5/2010
Regina Vertholdo	1/5/2010
Lisa Chiulli Lay	1/5/2010
Kate Byrne	1/6/2010
Wendy Mason	1/6/2010
Kate Latimer	1/6/2010
Ben Tobin	1/6/2010
Francis Brown	1/6/2010
Ariel Harms	1/6/2010
Stephanie Toews-Moeling	1/6/2010
Charles Sinkler	1/6/2010
Patricia Wellenkamp	1/6/2010
Al Amir	1/6/2010
Courtney Koslow	1/6/2010
Rory Keohane	1/6/2010
Kenneth Kelly	1/6/2010
Renee Scott	1/6/2010
Renan Leahy	1/6/2010
Chris Beal	1/6/2010
Daniel LeBlanc	1/6/2010
Shannon LeBlanc	1/6/2010
Angel (Tito) Meza	1/6/2010
Mary Jo Connelly	1/6/2010
Leanne Darrigo	1/6/2010
Feargal O'Toole	1/6/2010
Ed Marakovitz	1/7/2010
Sarah Juarez	1/7/2010
Catherine Brady	1/7/2010
Rachel Heller	1/7/2010
Lisa Williams	1/7/2010
Jeanne Eisenhaure	1/7/2010
Mary Haegert	1/7/2010
Suzanne Lubeck	1/7/2010
Helen Corrigan	1/7/2010
Rachel Bedick	1/7/2010
Janine Fay	1/7/2010
Ryan Vasios	1/7/2010
Caroline Litwack	1/7/2010
Alan Hamilton	1/7/2010
John Lawson	1/7/2010
Scott Erb	1/7/2010
Laurinda Bedingfield	1/7/2010

Alex Feldman	1/7/2010
Andy Pyman	1/7/2010
Jon O'Toole	1/7/2010
Julia Tawyea	1/7/2010
John Murray	1/7/2010
Susanne White	1/7/2010
Justin Moeling	1/7/2010
Claire Kozower	1/7/2010
Bruce Combs	1/8/2010

HJ

Brickbottom Artists Building/Condominium Trust
1 Fitchburg St. C101
Somerville, MA 02143

January 6, 2010



Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Project
EEA #13886

Dear Secretary Bowles and Ms. Johnson,

As the Trustees for the Brickbottom Artists Building/Brickbottom Condominium Trust, we are writing to comment on the DEIR/EA for the Green Line Extension Project, EEA #13886.

Generally, we are excited about this project and fully support the extension of the Green Line all the way to Rt. 16 ("Alternative 2b"). Somerville needs the improved public transportation and air quality benefits that the extension will bring, and believes the Project, if properly designed and mitigated, will greatly benefit the economic development of the Brickbottom and Inner Belt districts.

However, certain aspects of the Project have not been adequately addressed in the DEIR and warrant further MEPA review – the most significant being the proposed siting of the maintenance facility and storage yard, the evaluation of related impacts and the development of specific mitigation measures.

MAINTENANCE FACILITY AND STORAGE YARD

We vehemently oppose MassDOT's preferred siting of a maintenance facility and storage yard at the "Yard 8" site. MassDOT's preference for siting these facilities at Yard 8 is the result of a flawed and incomplete alternatives analysis, which, among other deficiencies, failed to appropriately account for the costs and significant adverse impacts associated with the Yard 8 alternative – on Brickbottom, the surrounding community and Somerville more broadly.

O-002-001

Yard 8 should be removed from further consideration and MassDOT should be required to complete its analyses of alternative locations for the maintenance facility and storage yard within the MEPA process. Siting the maintenance facility and storage yard at the "Yard 8" site:

- Would remove 11.5 acres of land from the City of Somerville's commercial tax base, a significant cost particularly given that most of this land is privately held and zoning approvals have already been issued for the development of that land.
- Would prevent ongoing efforts to build neighborhood cohesion and interconnections in this area by creating a permanent and impermeable barrier between the Inner Belt and the

O-002-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Brickbottom areas – in direct conflict with Smart Growth Principles and established municipal planning initiatives.

- Would derail future development of the Yard 8 site, which is one of the last remaining areas of developable land in our neighborhood and Somerville.
- Would disproportionately impact Brickbottom given Yard 8's proximity to Brickbottom and would disproportionately impact this area of Somerville by constituting a second large rail maintenance facility and storage yard within this small area (in addition to the Boston Engine Terminal, or BET, commuter rail maintenance facility). With the introduction of the Green Line Extension, residents of the Brickbottom Artists Building will also be living in perpetuity with two Green Line spurs on either side of its buildings, in addition to the commuter and freight lines that are already there. These disproportionate impacts are in direct conflict with the Certificate on the EENF (Environmental Justice, p. 7), which stated that "no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts."
- Would directly abut the Brickbottom Artist Building, an existing residential building that serves as home and work space for over 220 people, and would result in significant adverse impacts on our quality of life and property values due to noise, vibration, air pollution, visual impacts, loss of potential future interconnections to Inner Belt, etc… MassDOT has not sufficiently evaluated or accounted for these significant adverse impacts to Brickbottom.
- Has been opposed by the City of Somerville, the Somerville Chamber of Commerce, community groups, Brickbottom residents, and many other interested parties since it was first proposed. At the recent DEIR public hearing on November 18th and the meeting related to DOT's ongoing review of maintenance facility alternatives held at the Cambridge Multicultural Arts Center on December 16th, opposition to Yard 8 was unanimous.
- May force the Green Line Extension main line tracks to be closer to Brickbottom and does not leave room for the community path to continue along the tracks. If these facilities were sited elsewhere, it may be possible to shift the Green Line tracks farther away from Brickbottom (which would help decrease noise and vibration impacts from the lines themselves) and to route the community path along the tracks. The loss of these attributes were not properly considered in DOT's evaluation of the Yard 8 alternative – as costs associated with the Yard 8 alternative (or, on the flip side, as benefits associated with siting those facilities elsewhere).
- Was a preference developed without involvement and input from project's Citizen's Advisory Group. The CAG was not involved in DOT's evaluation of potential sites for the maintenance facility and storage yard before Yard 8 was identified as DOT's preferred alternative. Although DOT communicated its preference for Yard 8 to the CAG and at public meetings, it did not provide any meaningful opportunity for the Citizen Advisory Group, Brickbottom or other interest persons to participate in DOT's evaluation process. Additionally, mandated land use planning was not performed in connection with DOT's evaluation of alternatives for the siting of these facilities. DOT's flawed review process was in direct conflict with the community involvement requirements of the Secretary's Certificate on the EENF (Smart Growth/Land Use, p. 5).

O-002-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers connectivity and other land use impacts and opportunities associated with each maintenance facility site alternative.

As stated in FEIR Section 6.4.4, MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. These workshop offer an opportunity to discuss how facility design can influence indirect and cumulative effects, such as economic development.

O-002-003

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

O-002-004

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed in the vicinity of the Green Line Extension right-of-way to maximize operating efficiencies.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and

Regardless of the final choice of site, any maintenance facility and storage yard for the Green Line Extension should be planned in conjunction with comprehensive land use and economic development planning and designed so as to:

O-002-002
- Minimize adverse impacts on economic development and neighborhood connectivity.

O-002-003
- Consolidate all rail facilities (the new facilities and existing facilities) to the extent feasible by, for example, maximizing the use of the BET land (43 acre commuter rail maintenance facility) and consolidating other MBTA land uses (tracks, offices, etc) in the Inner Belt area.
- Minimize the facilities' footprint(s). For example:

O-002-004
  - MassDOT should be required to revisit its stated "needs" as related to the maintenance facility and storage yard. These facilities should be designed to accommodate only the needs of the Green Line Extension, not to address the existing additional needs and shortcomings of the Green Line facilities. By attempting to address the larger set of needs and existing shortcomings, MassDOT has defined its maintenance facility and storage yard "needs" such that many potentially viable siting alternatives were ruled out as too small and, therefore, not subjected to further analysis (see, e.g., p. ES-23 to ES-25 and 3-7 to 3-10). **To the extent MassDOT seeks to address system-wide maintenance and storage needs and shortcomings, it should be required to conduct a searching reexamination of all feasible alternatives, including evaluation of sites (or combination of sites) elsewhere in the Green Line system, not merely those along the Green Line Extension.**
  - Avoid construction of separate employee parking areas for MBTA workers if existing or new parking facilities can be shared.

O-002-005
- Blend with future mixed-use development, not perpetuate the area's historical industrial character (which Somerville planning initiatives seek to move away from in this area).

O-002-006
- Evaluate and plan rail traffic patterns, including switching and reversal of cars, as well as curvature in the railway tracks, so as to minimize noise and vibration impacts on nearby residences associated with the rail movements.

O-002-007
- Otherwise incorporate design measures to minimize the adverse impacts associated with the facilities (in addition to required off-site mitigation measures), such as by enclosing or screening the storage yard, thoughtful lighting designs and landscaping, etc…

O-002-008
- Incorporate construction and operational protocol consistent with sustainable design principles.

MassDOT acknowledges in the DEIR that it has not completed its review of alternatives for the siting of the maintenance and storage yard facilities. We were pleased to see that MassDOT has identified in the DEIR – and subsequently in its *Additional Maintenance Facility Study* report – two additional alternative sites for these facilities: Mirror H and Option L – that it represented it would evaluate further. That ongoing evaluation should be conducted within the MEPA framework.

O-002-009
From Brickbottom's perspective, the Mirror H site is probably the best of the proposed sites and Brickbottom would support Mirror H as the preferred alterative in a Final EIR.

Government Center; this storage will be lost due to the Green Line Extension.

O-002-005

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

O-002-006

FEIR Chapter 2 presents an analysis of noise and vibration impacts for each site alternative. The storage and maintenance facility and its rail approaches will be designed to minimize noise and vibration impacts to neighboring properties and stakeholders. Noise and vibration mitigation measures are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

O-002-007

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site. Design of the facility, in preliminary engineering, will take into consideration visual impact.

O-002-008

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include

O-002-010

The "Option L" site also appears to be a promising compromise location. However, further analysis of that option (including analysis of the potential design configurations, impacts and mitigation measures) is needed. Additional review of the Option L alternative should address the bulleted design items listed above. Specifically related to Option L, the review should also:

- Be done in conjunction with the 2010 Somerville master planning process for the Brickbottom/Inner Belt area.
- Minimize parking areas, possibly by sharing parking facilities with BET.
- Move storage farther away from Brickbottom (for example, by using the land currently reserved for parking).
- Minimize the amount of train storage required.
- Reduce track curvature at the western end (closest to Brickbottom), as higher noise and vibration levels are associated with tighter curves.
- Maximize consolidation and coordination opportunities with the BET commuter rail maintenance facility and other rail uses in the area wherever possible to minimize the total rail use footprint required in the Brickbottom/Inner Belt area.

It appears that one of the biggest potential downsides of Option L, as indicated in the *Additional Maintenance Facility Study*, is its projected cost, particularly the land acquisition cost. That cost is listed as $52 million (*Table 3-6 Order-of-Magnitude Conceptual Capital Cost Estimate for Option L)*. However, it is unclear how that number was developed. It appears from our own review of the Somerville assessor's database that the projected cost is significantly overstated and is more likely on the order of $16 million. The basis for this lower figure is described in the written comments being submitted on Brickbottom's behalf by its engineer, Tom Houston of Professional Services Corporation, PC.

PROJECT IMPACTS AND MITIGATION

While the DEIR, including the "Draft Section 61 Findings and Mitigation Commitments", identifies various mitigation measures as related to the extended rails and the maintenance and storage facilities, many are couched with caveats such as "to the extent practicable" and "where feasible." Many are also described only categorically or generally. The mitigation measures outlined in the DEIR and Draft Section 61 Findings do not adequately respond to the requirements of the Certificate on the EENF or MEPA's regulatory requirements more generally.

O-002-011

MassDOT should be required to more fully evaluate potential mitigation measures and to identify them more specifically in an FEIR and revised draft Section 61 Findings.

MassDOT should be required to attempt in good faith to negotiate Mitigation Agreements with the impacted communities and Brickbottom during the FEIR process (of the sort negotiated in connection with the Greenbush Line). These agreements would serve to more clearly specify enforceable mitigation goals, measures and deadlines and should establish an agreed upon process by which the community and affected abutters can seek redress if those goals, measures and/or deadlines are not met. These agreed-upon measures would facilitate and could be incorporated into MassDOT's Proposed and Final Section 61 Findings.

conceptual designs. Detailed designs for each station, the maintenance facility, and the entire Project will be refined during the preliminary engineering phase. As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR.

O-002-009

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-002-010

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal, including employee parking. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities.

O-002-011

MassDOT has developed proposed mitigation measures / draft Section

O-002-012 The DEIR lists the sequencing for most mitigation as not occurring until after construction. However, for the sake of the residents affected, mitigation (particularly for noise and vibration) should be established before construction begins wherever possible.

O-002-013 MassDOT should be required to more fully evaluate the cumulative impacts of the Project on Brickbottom – as needed to identify appropriate mitigation. With the introduction of the Green Line Extension, residents of the Brickbottom Artists Building will live in perpetuity with two Green Line spurs on either side of the building in addition to the commuter and freight lines that are already there (in addition to impacts from the maintenance facility and storage yard if located at Yard 8). While the DEIR discusses the Green Line Extension main line tracks on the east side of Brickbottom, it does not include any study of the Union Square branch tracks on the south side of the building. The tracks on that side are already noisy due to commuter train traffic on the Fitchburg Line and large Amtrak engines, freight trains and commuter trains that idle on the dead-end railhead, and the reverberating echo of all of those trains when they travel under the McGrath Highway overpass. The collective noise and vibration impacts of these and the projected Union Square spur need to be measured and projected to assess required noise and vibration mitigation.

O-002-014 The Brickbottom mitigation discussion in the DEIR is also confusing and the level of detail is insufficient. It lists only 40 of the 155 units in Brickbottom as designated for soundproofing, but gives no indication which units those are, how they were identified, or what that mitigation would be. Given the building's proximity to both lines of the extension, much more should be done including building-wide soundproofing and noise quieting systems at the trains themselves (e.g. acoustical absorption under the cars, HVAC fans designed to be more efficient and quieter, switching to EPA Level 3 diesel engines on the commuter rail trains).

The DEIR focuses on mitigation for indoor spaces at Brickbottom. However, outdoor mitigation is also needed for the only outdoor green space in the area, the award-winning Brickbottom Courtyard, which will be severely impacted by noise and vibration. The courtyard is open at both ends from the North and South and will reverberate with noise from both the proposed Yard 8 maintenance and storage facility and from both sides of the Green line.

O-002-015 Similarly, the DEIR does not address changes in indoor air quality that would result from having to keep windows closed in order for any building soundproofing to function.

O-002-016 MassDOT's repeated assurances in the DEIR that it will work further with Brickbottom during future design stages to evaluate impacts and to identify appropriate mitigation in the future is an unacceptable substitute for it conducting these efforts within the MEPA context. See, e.g., 301 CMR 11.07(6)(h) (Assessment of Impacts), 11.07(6)(j) (Mitigation Measures) and 11.07(6)(k) (Proposed Section 61 Findings). Among other things, the information derived from those efforts is critical to MassDOT's assessment of the feasibility and appropriateness of siting the

O-002-017 maintenance and storage yard facilities at Yard 8. MassDOT's evaluation of alternatives is incomplete and inadequate where it has not yet completed its evaluation of impacts associated with the feasible alternatives under consideration. See, e.g. 301 CMR 11.07(6)(f)(4) (requiring "an analysis of the principal differences among the feasible alternatives under consideration, particularly regarding potential environmental impacts.")

61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. Mitigation measures for the College Avenue and Lechmere Stations are further described in FEIR Chapters 4 and 5, respectively. The mitigation measures and procedures required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. As the Project advances into preliminary engineering and further detailed designs on mitigation are developed, MassDOT will work with abutters, as appropriate, to consider recommendations for mitigation.

O-002-012

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8. To the extent possible, MassDOT will work to implement appropriate mitigation measures prior to construction,

O-002-013

Anticipated indirect and cumulative effects of the Project, including impacts on corridor transportation and traffic, growth, property values, land use, transit-oriented and economic development are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects. As stated in FEIR Section 6.4, MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. These workshops will offer an opportunity to discuss how facility design can influence indirect and cumulative effects. The DEIR/EA did evaluate the noise impacts at the Brickbottom residences for both proposed Green Line branches.

Potential noise and vibration impacts were assessed for the southwest

ONGOING MEPA REVIEW AND COMMUNITY INVOLVEMENT

O-002-018 We respectfully request that further MEPA review be required – with particular focus being on further evaluation of alternative locations for the maintenance facility and storage yard and the related impacts and mitigation measures. MassDOT should be required to prepare an FEIR and revised, more comprehensive Proposed Section 61 Findings.

O-002-019 We also request that you consider establishment of a Special Review Process, pursuant to 301 CMR 11.09, which includes establishment of a Citizens Advisory Committee (CAC) pursuant to 301 CMR 11.09(3) – to oversee and facilitate the ongoing MEPA review process and to ensure meaningful opportunity for community input in this process.

O-002-020 As discussed above, MassDOT should also be required to attempt in good faith to negotiate Mitigation Agreements with the impacted communities and Brickbottom during the FEIR process (of the sort negotiated in connection with the Greenbush Line). These agreements would serve to more clearly specify enforceable mitigation goals, measures and deadlines and should establish an agreed upon process by which the community and affected abutters can seek redress if those goals, measures and/or deadlines are not met. These agreed-upon measures would facilitate and could be incorporated into MassDOT's Proposed and Final Section 61 Findings.

O-002-021 If efforts to negotiate Mitigation Agreements are unsuccessful, MassDOT should, alternatively, identify and commit unilaterally to more clearly specified and enforceable mitigation goals, measures and deadlines and should commit to establishing a process by which the community and affected abutters can seek redress if those goals, measures and/or deadlines are not met.

COMMUNITY PATH

O-002-022 In order to have the most impact and the best integration between neighborhoods, pedestrians, bicyclists and the Green Line, the Community Path should be designed and built in conjunction with the Green Line Extension.

O-002-023 The preliminary designs included in the DEIR are flawed in that they would provide Brickbottom with access to the Community Path only at Washington Street. As the only residents in the immediate area, and as an arts destination for Gallery shows, Open Studios, and other events, MassDOT should be required to evaluate designs/configurations that would provide more direct access between Brickbottom and the Community Path.

BRICKBOTTOM/WASHINGTON STREET STATION

O-002-024 MassDOT should be required to evaluate the location of this station directly at Washington Street – rather than south of it as proposed – in order to better serve the surrounding neighborhoods.

It should also be required to evaluate designs that would allow access from both sides of Washington Street and that would directly connect it to nearby bus stops.

facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-002-014

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-002-015

The Green Line Extension will have a positive impact on outdoor air quality within the study area. Indoor air quality is unique to each individual building, and is outside the scope of this project.

POTENTIAL FOR FUTURE STATIONS

O-002-025 The extension should be designed so that it does not preclude the possibility of future stations between Lechmere Station and Washington Street on the main line or between Lechmere and Union Square on the spur.

BRICKBOTTOM LAND TAKING

O-002-026 A strip of land on the south side of Brickbottom is listed as one of the land takings for the project. The details of this taking should be provided more clearly and more fully evaluated, as this taking has the potential to significantly impact the Brickbottom community.

CONCLUSION

The Green Line Extension is a great project that will have immense benefits for the communities that it will serve and we strongly support it. However, we request that the project not move to a Final EIR/EA with "Yard 8" as the preferred maintenance facility and storage yard location, and without written mitigation and citizen advisory committee agreements in place. A Supplemental EIR could be used to address these issues.

O-002-027 Also please find attached a petition against "Yard 8" with 231 signatures, including over 120 from people who do not live at Brickbottom, but who have attended one of several recent arts events in the building.

Sincerely,

Ramon Beuno, Trustee

Lee Busch, Trustee

Rob Kassel, Trustee

Julia Shepley, Trustee

Randal Thurston, Trustee

David Tonnesen, Trustee

Heather Van Aelst, Trustee

Robert Martel, Property Manager

O-002-016

MassDOT has been coordinating with the Brickbottom Artists Building Trust throughout the MEPA process. As described in Chapter 2 of the FEIR, the analysis of the maintenance facility alternatives considered issues raised by the Brickbottom Artists Building Trust. Chapter 6 of the FEIR describes the Public Involvement Plan for the design and construction process.

O-002-017

Chapter 2 of the FEIR provides an evaluation of the three maintenance facility alternatives as required by the Secretary's Certificate on the DEIR/EA.

O-002-018

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-002-019

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-002-020

The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. As the Project advances into preliminary engineering and further detailed designs on mitigation are developed, MassDOT will work with abutters, as appropriate, to consider recommendations for mitigation.

O-002-021

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. Mitigation measures for the College Avenue and Lechmere Stations are further described in FEIR Chapters 4 and 5, respectively. The mitigation measures and procedures for implementation required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. As the Project advances into preliminary engineering and further detailed designs on mitigation are developed, MassDOT will work with abutters, as appropriate, to consider recommendations for mitigation.

O-002-022

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-002-023

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-002-024

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process. Based on the analysis conducted during development of the DEIR/EA, it was determined that only one station would be warranted in the vicinity of the Brickbottom neighborhood and Washington Street. This analysis can be found in Appendix A of the DEIR/EA.

O-002-025

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-002-026

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

O-002-027

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

A PETITION OPPOSING THE SITING OF THE GREEN LINE MAINTENANCE AND STORAGE FACILITY IN "YARD 8"

RECEIVED JAN 8 2010 MEPA

O-003-001 We, the undersigned, oppose the siting of the proposed Green Line Maintenance and Storage Facility on the Yard 8 parcel in Somerville, Massachusetts. We strongly feel that siting the facility at Yard 8 will have a lasting, significant, and seriously adverse impact on the Brickbottom Artists Building and the surrounding community, and that mitigating measures will not be effective. Accordingly, an alternative site should be found.

Name	Address	Signature
Jim Wright	47 Vinal Ave Somerville MA 02143	[signature]
Scott Cooledge	1 Fitchburg St C-520 Brickbottom, Somerville MA	[signature]
Blake Stacey	1 Fitchburg St. B154 Somerville, MA	[signature]
Miki Polumbaum	1 Fitchburg St, C406 Somerville, MA 02143	[signature]
Charle Cameron	1 Fitchburg St C504 Somerville, MA 02143	[signature]
Carla Wilbur	1 Fitchburg St C407 Somerville, MA 02143	[signature]
Marilyn Pappas	1 Fitchburg St C415 Somerville 02143	[signature]
Jill Sloshburg – Jim Chase Ackerman	1 Fitchburg St. C415 12 Cooling Hill Rd. Cambridge 02138	[signature]
Cynthia Maurice	1 Fitchburg St C323	[signature]
Richard Garrett	21 Banford Way Waltham Ma 02453	[signature]
(Katherine) Kate Snodgrass	1 Fitchburg St., C-508 Somerville, MA 02143	(Katherine) Kate Snodgrass
Walter Gilbert	1 Fitchburg St, C319 Somerville, MA 02143	[signature]
Sarah Bapst	1 Fitchburg C102 Somerville MA	[signature]
Sylvie Vincent	1 Fitchburg St C120 Somerville, MA 02143	[signature]
[signature]		

O-003-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

A PETITION OPPOSING THE SITING OF THE GREEN LINE MAINTENANCE AND STORAGE FACILITY IN "YARD 8"

We, the undersigned, oppose the siting of the proposed Green Line Maintenance and Storage Facility on the Yard 8 parcel in Somerville, Massachusetts. We strongly feel that siting the facility at Yard 8 will have a lasting, significant, and seriously adverse impact on the Brickbottom Artists Building and the surrounding community, and that mitigating measures will not be effective. Accordingly, an alternative site should be found.

Name	Address	Signature
Christiana L Celi	1 FITCHBURG STREET C418	C. Celi
Eytan Fichman	1 Fitchburg Street B150	[illegible]
Dan Berman	1 Fitchburg St. #B553	[illegible]
Cathy Cling	1 FITCHBURG ST B356	[illegible]
ROGER JOHNSON	1 FITCHBURG ST B356	[illegible]
LOUIS GIPPETTI	1 FITCHBURG ST. B358	[illegible]
SUSANNA BARLING	" SOMERVILLE #C505 02143	[illegible]
DJ Filimon	1 Fitchburg St #C309	[illegible]
[illegible]	1 Fitchburg St C103	[illegible]
[illegible] SOM SMILEY	1 Fitchburg B353	[illegible]
LANNA GRADY	1 Fitchburg St C400	[illegible]
Kyle GRADY	1 Fitchburg St C400	[illegible]
[illegible]	1 Fitchburg St, #C406	
Mini Ann Polumbaum	1 Fitchburg St., #C406	[illegible]
LOUIS GIPPETTI	1 FITCHBURG ST. B358	[illegible]

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Name	Address	Signature
Dan Orlow	1 Fitchburg St Somerville	
Alden Zecha	1 Fitchburg St C320 Somerville	
Jennifer Markard	1 Fitchburg St C-314 Somerville	
C.R. Bourgeau	1 Fitchburg St #C514	
David H. Douglas	1 Fitchburg St, B454	
	1 Fitchburg St. C-301 Somer. Linda M. Gouvet	
Terry LANOFF	1 Fitchburg St C120	
JULIA STEELEY	1 Fitchburg St C312	
William Kipp	1 Fitchburg St C104A	
LANA CAMIEL	1 FITCHBURG ST #B456	
Susan Strauss	20 Willoughby St	
K. TRACY MUNN	1 Fitchburg St #C410	
Jessica Straus	1 Fitchburg St C101	
Bonnie Bartlwicke	1 Fitchburg St B159	

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Name	Address	Signature
Robert Goss	1 Fitchburg St Somerville MA	
Lana Hermann	1 Fitchburg St.-Somerville	
Beverly Sky	1 Fitchburg St. Somerville	
Priscilla Lamb Kennedy	1 Fitchburg st. C115 Somerville, MA	
ADELAIDE SMITH	1 Fitchburg St E220 Somerville	
Walter Gilbert	1 Fitchburg St C319 Somerville	
Deborah David	1 Fitchburg St B250 Somerville MA. 02143	
Sherry Aaron	1 Fitchburg St C515 Somerville MA 02143	
Kris Fiore	1 Fitchburg C-204	
Nicholas Watson	1 Fitchburg C-316	
Debra Chen	1 Fitchburg C-301	
William Kipp	1 FITCHBURG ST C104A	
Lisa Davidian	1 Fitchburg St F192	

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Name	Address	Signature
Scott Cooledge	"BRICKBOTTOM" 1 Fitchburg ST, C520 Somerville	[signature]
ALICE MAHONEY	BRICKBOTTOM 1 FITCHBURG ST SOMERVILLE STUDIO C118B	[signature]
Liz Goodnow	1 Fitchburg C5171 02143	[signature]
Bonnie Denis	1 Fitchburg St. C506 Somerville MA 02143	[signature]
Chuck Lechien Jr.	1 Fitchburg C506 Somerville MA 02143	[signature]
CATHERINE TRUMAN	1 FITCHBURG C215 SOMERVILLE 02143	[signature]
CARLA WILBUR	1 FITCHBURG ST SOMERVILLE, MA C407	[signature]
Julie Madjar	130 Bowdoin St Boston 02108	[signature]
George Summers Jr	1 Fitchburg St. C-206, 02143	[signature]
ELISSA Kather	1 Fitchburg ST B255 Somerville	[signature]
~~Mini Ann Polumbaum~~	~~1 Fitchburg St, Somerville MA C406~~	[signature]
Mini Ann Polumbaum	1 Fitchburg Street, C406 Somerville, MA 02143	[signature]
Pauline Lim	1 Fitchburg St. C914 Somerville MA 02143	[signature]
JOHN TRICOMI	1 FITCHBURG ST B-355 SOMERVILLE MA	John Tricomi

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Name	Address	Signature
Dave Horgan	65 Webster St. #201 Weymouth, MA.	[signature]
Marie Alice Gately	32 Claflin Rd. Brookline MA 02445	[signature]
James Graydon	44 Tudor Rd, Newton, MA 02467	J.S. Graydon
Emilie Josephs	42 Tudor Rd Newton, MA 02467	[signature]
Roberta Star Hudson	1 Aberdeen Way #122 Cambridge MA 02138	Roberta Star Hudson
Andra Grady	303 Newton St #12 Waltham, MA	[signature]
Kevin Umlauf	34 Flag Drive Bellingham, MA 02019	[signature]
Richard E Healey	64 R Prospect St. Cambridge, MA 02139	[signature]
Marion Bloch	33 Crescent Rd Belmont, MA 02478	[signature]
Laura Markley	14 Vinton St #2 S Boston MA 02127	Laura Markley
Jayme Lacour	1 Fitchburg St C509 Somerville MA 02143	[signature]
Jim Faulkner	79 Wallace St. Somerville, MA 02144	[signature]
Cindy Larson	1 Fitchburg St C321 Somerville MA	[signature]
Karen Blackerby	1 Fitchburg St #153B Somerville MA	[signature]
Derek Logan	1 Fitchburg #153B Somerville MA	[signature]

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Name	Address	Signature
PAULA BRODY	1 Fitchburg St Somerville MA	Paula Brody
ALAN Brody	1 Fitchburg St Somerville MA	
Max Kim	1 Fitchburg St Somerville MA	
Joelle Bueno	1 Fitchburg St Somerville MA	Joelle Bueno
Debora Davis	1 Fitchburg St	
RAMON BUENO Ramon Bueno	1 Fitchburg St. Somerville B550 MA	Ramon Bueno
Marjorie Forté	1 Fitchburg St. C-412	Marjorie Forté
Phyllis Silberg	19 Mt. Vernon St. Somerville	Phyllis Silberg
William Bennett	Fitchburg St C300	
Cynthia Pellegrini	1 Fitchburg #C 117	Cynthia Pellegrini
Lois B Bennett	1 Fitchburg C300	
RANDAL THURSTON	1 FITCHBURG #C209	
NORMAN FONG	1 FITCHBURG ST #C311	
JEANOT KIM	1 FITCHBURG ST C414	
Kellie Green	1 FITCHBURG ST C118A	

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Name	Address	Signature
DAVID COLOMBO	1 FITCHBURG ST C317	[illegible]
Robert Martel	1 Fitchburg St C125	[illegible]
CARLA JOHNSON	50 CLIVERMORE ST WATERTOWN	[illegible]
LISA VAAS	100 Child St. JP MA 02130	[illegible]
Katrikeen McGilvray	13 Palmer St Arlington, MA 02474	[illegible]
Noah Chesnin	476 Franklin St. #1 Cambridge, MA 02139	[illegible]
Jonathan McDowell	1 Fitchburg St C205	J.C. McDowell
Debra Weisberg Debra Weisberg	1 Fitchburg St B500	[illegible]
K. Spice/K. Craig	5 Ericsson St. 02478	[illegible]
Kelly Katz	12 Howes St. Cam	[illegible]
JOYCE ROOKLIN	39 Glendale St #3 Everett	[illegible]
Rebecca Alfenite	1 Fitchburg St # B154	[illegible]
Steve Thomas	25 Henderson St. Somerville	[illegible]
Stephen Gaun Stephen Gaun	119 Millside St., #3 Boston, MA 02120	Stephen R. Gaun
Lisa Desmoyk	16 Hawthorne St Somerville Mass 02144	Lisa Desmoyk

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Name	Address	Signature
DAN TREMITIERE	1 FITCHBURG ST #C519 SOMERVILLE, MA 02143	[illegible]
Heather Van Aelst	1 Fitchburg St C304 Somerville MA 02145	[illegible]
Felice Regan	1 Fitchburg St #C303 Somerville, MA 02143	Felice Regan
LAURA Tangusse	118 Winsor Ave Watertown MA 02472	[illegible]
MATTHEW TAYLOR	8 WALNUT ST EVERETT MA 02149	[illegible]
GARY LAVEIN	8 WALNUT ST #32 EVERETT MA 02149	[illegible]
[illegible]	66 Highland Circle Wayland	[illegible]
Gretchen Werner	108 Hesperus Ave Magnolia MA 01930	[illegible]
MICHAEL SKOBOWSKY	1 FITCHBURG ST C145 SOMERVILLE MA	[illegible]
Connie Blaszczyk	1 Fitchburg St B151 Somerville MA 02143	[illegible]
Liza Davidov	1 Fitchburg St. F198 Somerville MA 02143	[illegible]
Charlotte Kaplan	1 Fitchburg St C521 Somerville MA 02143	[illegible]
Ward Williamson	9 Dana St #4 Cambridge MA 02136	[illegible]
M. Weigel	82 Mystic St, Medford	Margaret Weigel
Andy Winther	19 Willoughby St Somerville MA 02143	Andy Winther

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Name	Address	Signature
[illegible]	19 Willoughby St	[illegible]
Elizabeth Maggioli	14 Beckett Ave	[illegible]
John Reilly	315 Harvard St	[illegible]
Sara Theophall	" "	[illegible]
Kevin Andrew	25 Willoughby St	[illegible]
Arizne Blonden	25 Willoughby St	[illegible]
Sara Green	23 Yorndike St. Apt 3C	[illegible]
Matt Kraft	1 Fitchburg St.	[illegible]
Paola Contreras	225 Northern Ave, Boston	[illegible]
Eric Grunwald	14 Dartmouth Pl., Boston	[illegible]
Louis Gippetti	~~1 Fitchburg St~~ Unit B358	[illegible]
Marja Roholl	1 Fitchburg Street, #C109	M. Roholl
Peggy Waldron	271 Western Ave. Cambridge, MA 02139	Peggy Waldron
Michelle [illegible]	182 Winn St Woburn MA 01801	[illegible]

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Name	Address	Signature
Catherine Hewitt	33 Dawn Ct. Wakefield, RI 02879	
Scott Getchell	221 Pearl St. Somerville 02145	
G Cherry	7 Berwick Rd Medford	gpc
Kevin Leahy	1909 comm.	
Anna Borodovsky	111 Lowell Rd N Reading	

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Name	Address	Signature
Christine Egitte	75 Washington St Medford MA	[illegible]
K. Tracy Munn	1 Fitchburg St. #C410	K. TRACY MUNN
Meredith Cohn	1 Fitchburg #C318	[illegible]
Ortan Fichman	1 Fitchburg St AB 150	[illegible]
Rebecca Arnoldi	89 Naples Rd Boston	[illegible]
AMANDA NELSEN	241 HURLEY ST #3	Amanda Nelsen
Margaret Blum	175 Richdale Ave Cambridge, MA 02140	Margaret S. Blum
TODD KAPLAN	44 Kidder Ave Som 02144	[illegible]
Ben Fuxa	12 Hillside Park Som 02143	[illegible]
SARAH DAVITT	200 HIGHLAND Som 02143	[illegible]
Irene Valiscous	1 FITCHBURG C107 Som 02143	[illegible]
Efharis Alepedis	8 E. Concord St, Boston 02118 1 Fitchburg St. C218, Somerville 02143	Efharis Alepedis
CAT BRYANT	47 Florence St# Somerville MA	[illegible]
Alma [illegible]	10 Roberta Dr. SD	Alma M. [illegible]
[illegible]	" "	DEAN LASKELL

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Name	Address	Signature
Karen [illegible]	14 Regans Hill Rd Leverett, Ma	
Rob Truslow	80 Harrison Avenue Woburn MA 01801	[illegible]
Rosalie DiCuccenzo	19 Washington St Stoneham, MA 02180	[illegible]
Paul DiCuccenzo	19 Washington St Stoneham, MA 0218	[illegible]
TED GULLIKSON	22 Laurel St #22 02143	[illegible]
MICHAEL ALEXIS	142 HOLYWOOD AVE Lowell 01852	[illegible]
Eric Bornstein	6 Campbell Pk Place	[illegible]
ALICE RICHMOND	39 BRIMMER BOSTON 02144 02108	[illegible]
ANDY SIEGEL	7 CRAWFORD ST. ARLINGTON MA 02474	[illegible]
MARK CHASE	13 Belmont St. Somerville	[illegible]
Lori L Reilly	39 Dane Ave. Somerville	[illegible]
George Tsalinis	91 Belgrade Av Roslind	[illegible]
Keith Buffo	27 Middlesex Rd Stoneham, MA	[illegible]
LES TAKACS	50 Fales RD. Plainville, MA	[illegible]
Miguel Gusik	81 A Woodall St. Cambridge, MA	[illegible]

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Name	Address	Signature
David D. Sullivan	195 Fairmount Ave H.P.	
Francisca Moraga	46 Procter Ave Apt 2 Revere MA	
[illegible]	132 Bruce St. Apt 3 Chelsea MA	
Xayida A. Trochez	167 Shurtleff St. apt #2 Chelsea, MA	
Cynthia Bromer	246 Battle St. Cambridge	
Nora Sinclair	992 Centre St JP 02130	
Joan Berman	41 Wildwood Dr, Needham	
Vivian Levin	215 S of Hill Rd. Needham MA	
Susan B. Jones	18 Lodge Road, Belmont, MA	
Manuel Marasco	88 Park Ave #411 Arlington MA	
[illegible]	88 Park Ave #411 Arlington MA	
Margaret Emily Merrill	62 Boylston St. Apt 119 Boston	
Tom Reiser	15 Josephine Av Somerville MA 02144	
BARBARA NOWAK	79 Highland Ave SOM	
Hazel Berchtz	63 Powell St. Brookline, MA 02446	

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Name	Address	Signature
Maggie Villiger	62 Sycamore St 02145	[signature]
Tom Eagan	" "	[signature]
Robert Rogers	68 Egerton Arlington MA 02474	[signature]
W. Dylewsky	43 Thackeray Rd Wellesley, MA 02481	[signature]
Pam Beaum Amiraun	35 Bexford St No. Andover MA 01845	[signature]
Beverly Gomes-Schwartz	15 Independence Ave Lexington, MA	[signature]
Davis Truslow	80 Harrison St Stoneham MA	[signature]
Marlena Shin	270 Highland Ave, #58 Somerville, MA 02143	[signature]
Jane Z. Murphy	20 Robinson Rd Lex.	[signature]
Eileen McGranahan	82 Winslow St Everett, MA. 02149	[signature]
Leonard A. Rizzuto	82 Winslow St. Everett, MA 02149	[signature]
Spellane Rockom	P.O. Box 941, Westport Pt MA 02791	[signature]
Andrea Stone	332 Franklin St Cambridge 02139	
Linda Wiltz	4577 Washington St Roslindale MA 0213	
Tim Kollihor	32 Prospect Norwood MA 02062	[signature]

A PETITION OPPOSING THE SITING OF THE GREEN LINE MAINTENANCE AND STORAGE FACILITY IN "YARD 8"

We, the undersigned, oppose the siting of the proposed Green Line Maintenance and Storage Facility on the Yard 8 parcel in Somerville, Massachusetts. We strongly feel that siting the facility at Yard 8 will have a lasting, significant, and seriously adverse impact on the Brickbottom Artists Building and the surrounding community, and that mitigating measures will not be effective. Accordingly, an alternative site should be found.

Name	Address	Signature
Kayloni Williams	383 Revere Beach Blvd #12 Revere, MA 02151	Kayloni Williams
Ben Ferber	11 Prospect Rd Arlington	[illegible]
MONIQUE GOETINCK	WELLFLEET, MA	[illegible]
Paul Goetinck	Wellfleet MA	[illegible]
Yves Oehner	Somerville	[illegible]
Al Solomon	16 Conwell Ave 02144	Al Solomon
[illegible] Campen	17 Kelly Road Cambridge MA 02138	[illegible]
Greg SALVO	148 Newbury #202 Quincy, MA 02171	[illegible]
Elaine Sidney	21 Hamilton Street Quincy, MA 02170	[illegible]
Laurie Israel	21 Hamilton St Quincy 02170	[illegible]
Louise McMurray	26 Royal Waterton MA 02472	[illegible]
Michael Durham	26 Royal St. Waterton MA 02472	[illegible]
Julie Gorn	13 Craig Pl. Brookline	Julie Gorn
Robert Gorn	13 Craig Place Brookline	Robert A Gorn
Pam Parcells	57A Rice St, Cambridge	[illegible]

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Name	Address	Signature
Peter Cutler	Brickbottom C525 1 Fitchburg ST. Somerville, MA	[signature]
[illegible]	#C403 - bBotton	[signature]
MARC PERRAS	#C403 - BRICKBOTTOM	[signature]
Karen Holtzman	Brickbottom #C523	[signature]
David Sholl	Brickbottom C322	[signature]

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Name	Address	Signature
JOSE CASTILLO	19 TIMOTHY AVE #3 EVERRET MA 02149	
PAT STEVENS	1 Fitchburg St Q 401 Somerville 02143	Pat Stevens
CHRIS MEARCH	1 FITCHBURG ST. C 306 SOMERVILLE, MA 02143	chris mearch

Professional Services Corporation, PC

Memorandum

RECEIVED
JAN 8 2010
MEPA

Date January 7, 2010

To Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Holly Johnson, EEA No. 13886
100 Cambridge Street, Suite 900, Boston, MA 02114

From

Thomas C. Houston, AICP, PE

Project Draft Environmental Impact Report/Environmental Assessment and Section 4(f) Statement
Green Line Extension Project

Subject Comments on the Draft Environmental Impact Report

Impacts of the Mainline Green Line Extension, the Union Square Branch, and the Yard 8 Maintenance and Storage Facility on Brickbottom Condominium Association Residents

Professional Services Corporation, PC (PSC) has been engaged by the Brickbottom Condominium Association to review the Draft Environmental Impact Report for the Green Line Extension Project and to submit comments on the Draft EIR on its behalf.

The residents of the Brickbottom Condominiums strongly support the Green Line Extension Project and recognize its significant benefits to the State, Somerville, and Brickbottom residents. However, the Brickbottom Condominiums will be significantly impacted by construction and operation of the mainline Green Line Extension and the Union Square Branch and to an even greater extent by construction and operation of the Yard 8 Maintenance and Storage Facility. The mainline Green Line Extension tracks will be constructed within 18 feet of the Brickbottom Condominiums and the project will necessitate acquisition of property from the Brickbottom Condominium Association. The Yard 8 Green Line

Ten Lincoln Road
Suite 201
Foxboro, MA 02035-1387

Tel. 508.543.4243
Fax 508.543.7711

Maintenance and Storage Facility is proposed for construction adjacent to the mainline Green Line Extension abutting the Brickbottom Condominiums.

Based upon our review, we find that the "Draft Environmental Impact Report" (Draft EIR) and related documents for the Green Line Extension are fundamentally inadequate. Among other issues (as identified in the additional comments letters that will be submitted by and on behalf of Brickbottom), the documents fail to properly evaluate alternatives to the Yard 8 site, fail to identify and evaluate the probable impacts of the Green Line Extension Project on the Brickbottom Condominium residents, and fail to provide commitments sufficient to mitigate the significant adverse impacts of the Project on the Brickbottom Condominiums.

Of even greater concern, the Draft EIR fails to document provisions to avoid and minimize significant adverse impacts on the Brickbottom Condominiums caused by construction and operation of the Yard 8 Maintenance and Storage Facility. The Yard 8 Maintenance and Storage Facility is inconsistent with the purpose and intent of the MEPA process because its construction and operation cause significant adverse impacts which cannot be effectively alleviated through incorporation of proposed mitigating measures.

The Brickbottom Condominium residents regard construction of the Yard 8 Maintenance and Storage Facility as intrinsically unacceptable and will exhaust all administrative and legal remedies to preclude its construction. However, should such efforts prove unsuccessful, we are concerned that MassDOT has not sufficiently evaluated and identified effective and sufficient mitigation measures – or demonstrated that there are any measures capable of effectively mitigating the significant adverse impacts of the Yard 8 Maintenance and Storage Facility.

O-004-001

We request that the Executive Office of Energy and Environmental Affairs (EEA) retain continuing jurisdiction beyond the Draft EIR and we request that any finding that the "Environmental Impact Report" adequately and properly complies with MEPA be withheld until MassDOT (1) completes its analysis of alternatives to Yard 8 (in a manner that addresses the substantive and procedural defects identified in this memorandum), (2) completes a meaningful evaluation of the potential impacts of the Project on the Brickbottom Condominium residents, (3) completes a meaningful analysis of design and other measures to avoid and minimize those impacts (whether or not Yard 8 remains the preferred site for the Maintenance and Storage Facility), and (4) provides specific and binding commitments to effectively mitigate the significant adverse impacts of the Project on the Brickbottom Condominiums.

PROCEDURAL ISSUES

VHB's December 9, 2009 "Technical Memorandum, Green Line Extension Project Additional Maintenance Facility Alternatives Analysis" – issued after publication of the Draft EIR – purports to contain "…a preliminary analysis of the additional alternatives [to Yard 8] … as well as a preliminary

O-004-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA. The following responses to comments address these specific issues.

evaluation of potential environmental impacts…"[1] However no analysis of environmental impacts is actually included. The Memorandum states that "…a full environmental analysis has been conducted for the Yard 8 location"; however, MassDOT proposes to conduct "…a full analysis of environmental impacts (to natural resources, air quality, noise and vibration, historic resources, as well as social and economic impacts)…in a Notice of Project Change" after MassDOT has already reached a decision to substitute a Maintenance and Storage Facility Alternative for the Yard 8 Maintenance and Storage Facility. The process advanced by MassDOT is fundamentally inconsistent with the purpose of MEPA. The purpose of environmental documents under MEPA is to provide the State decision maker with a decision making tool allowing the decision maker to integrate concerns for the preservation and enhancement of environmental quality into the overall state decision process.

O-004-002 In an earlier document entitled "Executive Office of Transportation and Public Works, Green Line Extension Project, Green Line Support Facility Alternatives Analysis," MassDOT provided a conceptual analysis of maintenance and storage facility alternatives.[2] However, this document should not be regarded as an effective evaluation of alternatives because as stated "Of the numerous sites considered in the screening process, only Yard 8 with the Adjacent Parcel was of a sufficient size and configuration to effectively store the required cars and house a support facility while providing the operational flexibility that is needed for such a facility…" Fundamentally, MassDOT defined a "program" requiring a site containing a minimum area of approximately 10 acres to achieve the goals of the program. The analysis evaluated numerous sites which did not contain the defined minimum requisite 10 acres of land. MassDOT then rejected these sites as ineffective in that they could not meet the minimum functional requirements for the maintenance and storage facility. The fundamental reason for the failure of these sites to meet the program objectives is that none of the sites except Yard 8 contained the purported minimum requisite area of 10 acres.

DEFICIENCIES OF THE ENVIRONMENTAL IMPACT ANALYSIS RELATING TO IMPACTS ON THE BRICKBOTTOM CONDOMINIUMS

O-004-003 The Draft EIR does not properly identify and evaluate the probable impacts of the mainline Green Line Extension and the Yard 8 Maintenance and Storage Facility on the Brickbottom Condominiums. As such MassDOT will not have an accurate documentation of the probable impacts caused by construction and operation of the mainline Green Line Extension and the Yard 8 Maintenance and Storage Facility on the Brickbottom Condominiums. Without an accurate evaluation of impacts, MassDOT cannot properly develop and implement measures to mitigate impacts on the Brickbottom Condominiums or conduct an adequate comparison of the siting alternatives.

[1] VHB/Vanasse Hangen Brustlin, Inc. and PB Americas, Inc., "Technical Memorandum, Green Line Extension Project Additional Maintenance Facility Alternatives Analysis," December 9, 2009, Page 1-1.
[2] Vanasse Hangen Brustlin, Inc., "Executive Office of Transportation and Public Works, Green Line Extension Project, Green Line Support Facility Alternatives Analysis," November 6, 2008.

O-004-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-004-003

The DEIR/EA did evaluate the impacts of both Green Line Extension branches on the Brickbottom Artists Building, in combination with the impacts of Yard 8. FEIR Chapter 2 expands this analysis to include impacts from Option L, the preferred storage and maintenance facility location.

The following sections of this memorandum identify specific deficiencies in the analysis of environmental impacts for the mainline Green Line Extension and the Yard 8 Maintenance and Storage Facility.

LAND USE IMPACTS

The evaluation of land use impacts as set forth in the Draft EIR is based on property displacements and acquisitions. The Draft EIR states "For this section, direct effects or direct impacts on land use are defined as displacements of properties or property acquisitions required for the Project." The basis of evaluating land use impacts particularly as they relate to the Brickbottom Condominiums is flawed and inadequate.

O-004-004

The basis of contemporary land use control is locating land uses in proximity to land uses that are compatible in terms of their environmental effects such as noise, traffic, visual quality, etc. The Brickbottom Condominiums which is a residential use is incompatible with and will be negatively impacted by construction and operation of the Yard 8 Green Line Maintenance and Storage Facility in immediate proximity to the Brickbottom Condominiums. The Yard 8 Maintenance and Storage Facility will adversely impact the Brickbottom Condominiums in terms of noise, vibration, visual quality, and other effects. The Yard 8 Maintenance and Storage Facility is fundamentally incompatible with residential land use, as well as with local planning initiatives.

Under the provisions of the "Somerville Zoning Ordinance," the Brickbottom Condominiums consisting of artist live and work space in excess of 7 units is a use permitted in the IA District under Special Permit with Site Plan Review. [3] It is inaccurate to represent that industrial and other high intensity uses such as warehouse and retail could be located in proximity to the Brickbottom Condominiums absent strict control of any incompatible aspects of these uses. Under the Zoning Ordinance, uses having environmental affects potentially affecting artist live and work space are permitted by Special Permit with Site Plan Review, particularly for uses exceeding minimum floor area thresholds, typically 10,000 sq.-ft. GFA. The Special Permit process accords the Special Permit Granting Authority, broadly based discretion to impose limitation on the nature and scale of the use and to impose requirements for mitigation such as buffers and fencing. Accordingly, industrial uses and other high intensity uses would only be allowed under the provisions of a restrictive Special Permit and Site Plan Review process which would protect the Brickbottom residents and ensure compatibility with the existing Brickbottom residences.

Representations that the Maintenance and Storage Facility is a permitted use in the IA District are incorrect. Railroad terminals and yards, including operations conducted outside enclosed buildings are

[3] The Somerville Zoning Ordinance adopted on March 23, 1990, and further updated through Ord. No. 2009-12, adopted June 25, 2009, Section 3.e.

O-004-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site. Land use impacts from Option L are also described in FEIR Chapter 2.

prohibited in the IA District.[4] Prior to construction, the Somerville Zoning Ordinance must be amended in order to permit the storage facility portion of the Yard 8 Maintenance and Storage Facility. As such an amendment would be limited to a specific location and would benefit solely MassDOT; it would reasonably be categorized "spot zoning" which is not permissible.

The Draft EIR does not identify and evaluate the land use impacts of either the Mirror H Maintenance and Storage Facility or the Option L Maintenance and Storage Facility.

O-004-005

- The Mirror H Maintenance and Storage Facility can be designed such that it is fully compatible with adjacent land uses. It is compatible with the adjacent Boston Engine Terminal. Where the NorthPoint Development is not built-out and the portion of the development adjacent to the Mirror H Maintenance and Storage Facility is not constructed, there is an opportunity to adapt the NorthPoint development to minimize any incompatible elements as the Mirror H Maintenance and Storage Facility will predate development of sites within the NorthPoint development that immediately abut the Mirror H Maintenance and Storage Facility.

- The Option L Maintenance and Storage Facility could be compatible with adjacent land uses. It is compatible with the adjacent uses which are exclusively industrial in nature.

The Brickbottom Condominiums will also be adversely impacted by the Green Line Extension, including the Union Square branch; however, these impacts can to some extent be mitigated through measures proposed by MassDOT and as set forth hereinafter in this memorandum.

O-004-006

With respect to property acquisition, the Draft EIR states that 954 sq.-ft. of land will be acquired from the Brickbottom Condominiums in order to construct track improvements for the Union Square branch under Alternatives 1, 2, and 5.[5] However, there is no evaluation of the impacts that this acquisition will have on the Brickbottom Condominiums in terms of access, circulation, parking, etc. – and given the limited space in this area for these activities, the impacts may be significant. For Alternatives 3 and 4, 1,356 sq.-ft. would be acquired from the Brickbottom Condominiums for track improvements. Similarly, there is no evaluation of the impacts that this acquisition will have on the Brickbottom Condominiums. Acquisition impacts for Alternative 6 with respect to Brickbottom Condominiums are not clearly identified.

[4] City Of Somerville, Ordinance No. 2009-14, in the Board Of Aldermen: November 12, 2009, "An Ordinance Amending the Somerville Zoning Ordinance to Alter Uses Allowed in the IA, IB, And IP Industrial Districts and to Make Associated Map Changes," Article 7: Permitted Uses, 15. Communications, Utility, and Transportation Uses, 5. Railroad Terminals and Yards, Including Operations Conducted Outside Enclosed Buildings, a and b.
[5] Draft Environmental Impact Report, Table 5-5.2.

O-004-005

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives, including land use impacts, is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-006

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

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SOCIOECONOMIC IMPACTS

O-004-007 The Draft EIR utilizes property tax increases and decreases as a measure of impact. The basis of evaluating socioeconomic impacts based upon property tax impacts as they relate to the Brickbottom Condominiums is flawed and inadequate. Construction and operation of the Yard 8 Maintenance and Storage Facility in immediate proximity to the Brickbottom Condominiums will have a blighting effect on the Brickbottom Condominiums in terms of noise, vibration, structural damage from vibration, and visual quality. Accordingly, the property value and related property assessments and property taxes on units within the Brickbottom Condominiums will decrease. As the total assessed value of the Brickbottom Condominiums is in an order of magnitude of $40 million, the impact on City tax revenues could be significant.

Construction of the Yard 8 Maintenance and Storage Facility will require land acquisition and will require "voiding" an existing building permit for a 190,000 sq.-ft. building. The loss of potential property tax revenue form this site far exceeds losses in potential property tax revenues from Mirror H or Option L.

O-004-008 The Draft EIR does not identify and evaluate the socioeconomic impacts of the Mirror H or Option L Maintenance and Storage Facility alternatives.

- Whereas the portion of the NorthPoint Development adjacent to the Mirror H Maintenance and Storage Facility is not constructed, there is an opportunity to adapt the NorthPoint development to minimize any incompatible elements and the Mirror H Maintenance and Storage Facility will not affect the current property tax revenue from the NorthPoint development site nor should it diminish the assessed value or property tax revenue following redevelopment

- The Option L Maintenance and Storage Facility will necessitate the acquisition of two developed properties and will decrease existing property tax revenue. However, this reduction in property tax revenue could be mitigated if these businesses were to be relocated within the City of Somerville. The Option L Maintenance and Storage Facility is fully compatible with adjacent industrial land uses and will not adversely impact property tax revenues from adjacent sites.

NOISE IMPACTS

With respect to the Brickbottom Condominiums, the Draft EIR categorizes the increase in noise as a "severe impact." Noise at the "northeast façade" of the Brickbottom Condominiums will increase from 57.6 Ldn to 76.4 Ldn for Alternatives 1, 2, 3, and 4 and from 57.6 Ldn to 79.2 Ldn for Alternatives 5 and 6.

O-004-007

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives, including socioeconomic impacts, is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site. The City of Somerville anticipates redeveloping the entire area surrounding the Brickbottom Artists Building in a way that would increase property values. In general, access to rail transit also increases property values.

O-004-008

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering.

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O-004-009 The noise impact analysis is deficient in that it fails to identify and evaluate interior noise levels within the Brickbottom Condominiums building. It does not identify the noise attenuation characteristics of the existing structure and the extent to which insulation or glazing will, or will not, decrease interior noise levels.

The noise analysis is deficient in that it fails to identify noise levels other than the northeast façade, particularly given the location of Green Line tracks on two sides of the Brickbottom Condominium building.

The noise analysis is deficient in that it fails to identify noise levels within the ground level courtyard which is intensively used by residents and will be impacted by increased noise.

The noise analysis is deficient in that it fails to identify feasible mitigation for the projected severe noise impacts. For the Brickbottom Condominiums and other impacted buildings, the Draft EIR states that

> During the preliminary engineering phase of the project, the existing outdoor-to indoor noise reduction of the buildings will be measured. An analysis will be made as to whether the noise reduction of the building could be improved by five decibels or more with sound insulation treatments. The effectiveness of potential noise barriers to reduce interior noise levels at these locations will also be assessed.[6]

Failure to perform the analysis required to identify feasible noise mitigation is inconsistent with the required Scope for the Draft EIR. Based upon the lack of required analysis, there is no basis for the conclusion that "With mitigation, there would be no moderate or severe noise impacts from the Project."[7]

O-004-010 The Draft EIR does not identify and evaluate the noise impacts of Mirror H Maintenance and Storage Facility. Noise generated by the Mirror H Maintenance and Storage Facility should not adversely impact the adjacent Boston Engine Terminal. Where the NorthPoint Development is not built-out and the portion of the development adjacent to the Mirror H Maintenance and Storage Facility is not constructed, there is an opportunity to incorporate noise abatement measures in the design of the NorthPoint development.

The Draft EIR does not identify and evaluate the noise impacts of Option L Maintenance and Storage Facility. The adjacent land uses which are exclusively industrial in nature are not sensitive to any noise generated by the Option L Maintenance and Storage Facility.

[6] Draft EIR, p. 118.
[7] Draft EIR, p. 120.

O-004-009

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. In addition, the outdoor-to-indoor noise level reductions of the existing Brickbottom Artists Building façades have been measured and future interior noise levels have been projected and assessed against appropriate criteria. These findings are reported in the FEIR, including more detailed mitigation recommendations.

Based on recent site visits to the property, exterior land use with frequent human use has been identified at Brickbottom Artists Building and potential noise impact and mitigation will be assessed accordingly. Findings and associated mitigation commitments will be evaluated during preliminary engineering.

O-004-010

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives, including noise impacts, is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

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VIBRATION IMPACTS

The Draft EIR projects that vibration levels will increase from 18 VdB to 77 VdB at the "northeast façade" of the Brickbottom Condominiums for Alternatives 1, 2, 3, 4, and 5. Vibration levels are not provided at this location for Alternative 6. The projected 77 VdB exceeds the criterion of 72 VdB for frequent events.

O-004-011

The analysis is deficient in that it fails to identify vibration levels other than the northeast façade, which is critical given the location of Green Line tracks on two sides of the Brickbottom Condominium building.

The analysis is deficient in that it fails to evaluate the effectiveness of proposed mitigation. Vibration mitigation is proposed along a 500 foot long segment of Green Line track along the northeasterly side of the Brickbottom Condominiums.

Although Green Line tracks will be constructed on two sides of the Brickbottom Condominiums, no vibration mitigation is proposed along the Union Square branch.

A menu of potential vibration attenuation measures are listed in Section 5.8.3 but there are no specific measures designated. The Draft EIR does not project vibration levels following implementation of the mitigating measures. The Draft EIR states that

> "During the preliminary engineering phase of the project, vibration measurements will be conducted at several properties expected to be impacted by vibration. These measurements will further refine the vibration reduction needed to mitigate potential impact. A vibration reduction goal for mitigation measures, such as ballast mats or resilient fasteners, will be specified in the bid documents." [8]

Failure to perform the analysis required to identify feasible mitigation is inconsistent with the required Scope for the Draft EIR. Based upon the lack of required analysis, there is no basis for the conclusion that:

> "Vibration mitigation, including up to 19,700 track-feet of vibration mitigation… and the relocation or use of specially-engineered trackwork…for 12 crossovers and turnouts, would be effective in keeping future vibration levels at or below existing levels for commuter trains and reducing future vibration from Green Line trains below the impact criterion." [9]

[8] Draft EIR, p. 131.
[9] Draft EIR, p. 132.

O-004-011

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-004-012 The Draft EIR does not identify and evaluate the vibration impacts of the Mirror H and Option L Maintenance and Storage Facility alternatives.

- Vibration caused by the Mirror H Maintenance and Storage Facility should not adversely impact the adjacent Boston Engine Terminal. Where the NorthPoint Development is not built-out construction phase vibration impacts will not affect undeveloped sites.
- The adjacent land uses which are exclusively industrial in nature are not sensitive to vibration caused by the Option L Maintenance and Storage Facility.

HISTORICAL RESOURCE IMPACTS

O-004-013 The Brickbottom Condominiums, formerly the A&P Grocery Warehouse, is eligible for listing in the National Register.[10] The Brickbottom Condominium Association has engaged a professional consultant to facilitate the nomination process to include the former A&P Grocery Warehouse building on the National Register of Historic Places. The Draft EIR is deficient in that it fails to identity adverse indirect impacts on this National Register eligible property.

O-004-014 Indirect impacts from construction of the Yard 8 Maintenance and Storage Facility include visual impacts and other impacts on the setting and character-defining features of the A&P Warehouse Building (Brickbottom Condominiums).

O-004-015 Noise and vibration from the Green Line tracks will adversely impact the A&P Warehouse Building (Brickbottom Condominiums), particularly the "severe impacts" from noise. The evaluation of impacts is deficient in that there is no basis for the statement following listing of the A&P Warehouse Building as a severely impacted property that "None of these properties are considered sensitive to noise..."[11]

O-004-016 The analysis of indirect impacts is deficient in that it fails to identify and evaluate the visual impacts of the Yard 8 Maintenance and Storage Facility on the setting of the A&P Warehouse Building (Brickbottom Condominiums).

O-004-017 The Draft EIR does not identify and evaluate impacts on historical resources caused by the Mirror H Maintenance and Storage Facility or the Option L Maintenance and Storage Facility. There are no national register eligible properties identified in proximity to either the Mirror H or the Option L sites. Accordingly neither the Mirror H Maintenance and Storage Facility or the Option L Maintenance and Storage Facility should impact historical resources.

[10] Draft EIR, p. 150.
[11] Draft EIR, p. 151.

O-004-012

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives, including vibration impacts, is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-004-013

As stated in Section 5.13.2.2 of the DEIR/EA, there would be indirect visual impacts to nearby historic architectural resources from the Yard 8 storage and maintenance facility but the effects are not expected to be adverse. As noted above, the Yard 8 site has been eliminated from further consideration, and Option L has been selected as the preferred maintenance facility site.

O-004-014

Please see response to Comment O-004-013.

O-004-015

The quoted sentence concludes with "... the increase in noise would not alter the characteristics that qualify these properties for listing in the National Register." That is, a sense of quiet is not a factor in the listing eligibility determination for this property.

O-004-016

As stated in Section 5.13.2.3 of the DEIR/EA, indirect visual impacts on the setting of nearby historic architectural resources are expected from the Yard 8 facility, but the effects are not expected to be adverse. In any event, the Yard 8 site has been eliminated from further consideration for the storage and maintenance facility; Option L is the preferred site.

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ARCHAEOLOGICAL RESOURCE IMPACTS

The Draft EIR acknowledges the potential for archeologically sensitive strata below railroad and upper fill deposits in the Yard 8 Maintenance and Storage Facility impact area.

O-004-018 If the Yard 8 Maintenance and Storage Facility continues to be considered for implementation, then subsurface testing as part of an intensive (locational) archaeological survey may be warranted in consultation with the FTA, MassDOT, and MHC. Should any significant and National Register-eligible archaeological resources be identified, then measures to avoid, minimize, or mitigate any adverse effects will required and may include an archaeological data recovery program din accordance with state and Federal requirements. Based upon the above, continued consideration of the Yard 8 Maintenance and Storage Facility could significantly impact the Project schedule.

O-004-019 The Draft EIR does not identify and evaluate impacts of Mirror H Maintenance and Storage Facility on archaeological resources.

The Draft EIR does not identify and evaluate impacts of Option L Maintenance and Storage Facility on archaeological resources. However, the Option L Maintenance and Storage Facility site was extensively disturbed to construct the two modern buildings on these sites and therefore should have relatively low sensitively with respect to archaeological resources.

SECTION 4(f)

O-004-020 The Draft EIR states that 954 sq.-ft. of land will be acquired under Alternatives 1, 2, and 5 and 1,356 sq.-ft. of land will be acquired under Alternatives 3 and 4 from the Brickbottom Condominiums in order to construct track improvements. The A&P Warehouse Building (Brickbottom Condominiums) is eligible for nomination to the National Register. Pursuant to Section 106 of the National Historic Preservation Act of 1966 and Section 4(f) of the U.S. Department of Transportation Act of 1966 the proposed land taking from an historic site of national, state, or local significance cannot be authorized unless there is no feasible and prudent alternative.

Neither the Mirror H Maintenance and Storage Facility site nor the Option L Maintenance and Storage Facility site have structures having characteristics making them eligible for inclusion on the National Register. Provisions of Section 106 of the National Historic Preservation Act of 1966 and Section 4(f) of the U.S. relating to land takings would not apply.

INDIRECT IMPACTS

The Draft EIR's evaluation of "Indirect and Cumulative Effects" includes proposals for air rights development over the proposed Yard 8 Maintenance and Storage Facility which would be consistent with

O-004-017

In accordance with the Secretary's Certificate on the DEIR/EA, impacts to selected environmental resources from the alternative maintenance facility sites are evaluated in the FEIR, Chapter 2.

O-004-018

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-019

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives, including archaeological resources. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering.

O-004-020

Section 4(f) and Section 106 regulations would apply to any land acquisition required from the former A&P Warehouse property. During preliminary engineering, MassDOT will continue to evaluate opportunities to minimize property acquisitions and impacts.

An expanded technical and environmental analysis of the light rail

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the MBTA's stated desire for a covered facility and would also foster Transit Oriented Development. MassDOT also proposes to enhance the aesthetic features of the exterior of the maintenance facility to help encourage quality redevelopment nearby. MassDOT proposes heavy visual screening by landscaping or walls, especially adjacent to the outdoor rail car storage area.

O-004-021 Enclosing, screening, and shielding the Yard 8 Maintenance and Storage Facility would help to minimize potential adverse visual, noise and access impacts on Brickbottom residents. However, the environmental analysis is deficient in that it does not evaluate the potentially significant impacts of various air rights development options on the Brickbottom Condominiums. One MassDOT proposal is for a parking deck over the storage yard. While this would provide weather protection for the Green Line cars, an extensive parking deck could also pose its own visual quality concerns as viewed from the upper floors of the Brickbottom Condominiums. MassDOT suggests using air rights development to create new open space would generally have very positive impacts on Maintenance and Storage Facility; however; active recreation such as MassDOT's proposal for playing fields could raise noise and lighting concerns. Any air rights development should be limited to uses that are compatible with and enhance the residential use of the Brickbottom Condominiums and must be appropriate in scale to avoid impacts arising from over development.

The Draft EIR is deficient in that it does not contain sufficient information to evaluate the impacts of these air rights development options. The selection, refinement and development of any air rights development in the Brickbottom area should be developed and evaluated with formal input from the Brickbottom Condominiums and other impacted residents and the City of Somerville.

O-004-022 The Draft EIR does not identify or evaluate indirect impacts of the Mirror H Maintenance and Storage Facility or the Option L Maintenance and Storage Facility. Due to the similar nature of the use, any indirect impacts of the Mirror H Maintenance and Storage Facility should not adversely affect the adjacent Boston Engine Terminal. Where the NorthPoint Development is not built-out and the portion of the development adjacent to the Mirror H Maintenance and Storage Facility is not constructed, there is an opportunity to adapt the design of the NorthPoint development to minimize any indirect impacts. Any indirect impacts of the Option L Maintenance and Storage Facility should not adversely affect the adjacent industrial uses.

VISUAL IMPACTS

O-004-023 The Yard 8 Maintenance and Storage Facility would introduce a preeminent and discordant visual focal point into corridor which would be uniquely visible from the Brickbottom Condominiums. The scale and utilitarian nature of the maintenance building and the scale and unsightly character of the massive open storage facility will have a blighting effect on the Brickbottom Condominiums and are incompatible with residential use.

storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-021

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-022

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement

Proposals for air rights development cannot change the massive scale of the Maintenance and Storage Facility and visual impacts of such an extensive facility will be negative.

O-004-024 The Draft EIR does not identify and evaluate the visual impacts of the Mirror H and Option L Maintenance and Storage Facility alternatives.

- The adjacent Boston Engine Terminal will not be impacted. Where the NorthPoint Development is not built-out and the portion of the development adjacent to the Mirror H Maintenance and Storage Facility is not constructed, there is an opportunity to incorporate adapt the design of the NorthPoint development to minimize any visual impacts caused by the Mirror H Maintenance and Storage Facility.
- The adjacent land uses to Option L, which are exclusively industrial in nature, should not be adversely impacted.

CONSTRUCTION IMPACTS

Identification and evaluation of the construction phase impacts of mainline Green Line Extension and the Yard 8 Maintenance and Storage Facility are measurably deficient. Construction phase impacts are significant but are generally presented in a qualitative and cursory manner. A more thorough analysis of construction phase impacts should be provided with detail proportionate to the significance of the impact.

The Yard 8 Maintenance and Storage Facility and continuous mainline Green Line Extension right-of-way and the Union Square branch right-of-way comprise the largest single construction site within the corridor. In general, construction phase impacts for this extensive area are summarily and non-quantitatively evaluated.

O-004-025 There is no quantification for fugitive dust during construction of Yard 8 Maintenance and Storage Facility and adjacent Green Line Extension rights-of-way and no information on the properties of on-site soils. There is no quantitative evaluation of the type and number of construction vehicles and equipment, the duration of their use on-site, or the routes to be used by construction equipment.

There is no evaluation of hours of operation during construction of the Yard 8 Maintenance and Storage Facility including evaluation of work on weekend days and holidays.

There is no evaluation of construction phase traffic for the Yard 8 Maintenance and Storage Facility including the type and number of construction truck and equipment trips and construction worker trips and no evaluation of routes for construction truck and worker trips.

There is no quantitative and no detailed qualitative evaluation of construction phase noise impacts for Yard 8 Maintenance and Storage Facility and adjacent Green Line rights-of-way. In fact, the entire

during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-004-023

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-024

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes an evaluation of the visual impacts of the three maintenance facility alternatives, and impacts to land uses. As documented in the FEIR, Option L is MassDOT's preferred location for the maintenance facility. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering.

O-004-025

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

For any maintenance facility site, construction contractors will be

O-004-025 construction phase evaluation of noise impacts encompasses 70 words. It is likely that the building required for the Yard 8 Maintenance and Storage Facility will be pile supported as well as components of the Green Line itself. Pile driving causes potentially significant noise impacts, but there is no quantitative or detailed qualitative evaluation of noise impacts from pile driving. There is no information on the number or location of piles or the anticipated duration of pile driving.

Pile driving whether impact or vibratory has the potential to cause significant vibration impacts. There is no quantitative or detailed qualitative evaluation of noise impacts from pile driving. There is no information on the number or location of piles or the anticipated duration of pile driving. In fact the entire evaluation of construction phase vibration impacts encompasses 36 words.

O-004-026 The Draft EIR does not identify and evaluate construction impacts of the Mirror H or Option L Maintenance and Storage Facility alternatives.

- Construction of the Mirror H Maintenance and Storage Facility should not adversely impact the adjacent Boston Engine Terminal. Where the NorthPoint Development is not built-out and the portion of the development adjacent to the Mirror H Maintenance and Storage Facility is not constructed, construction impacts such as noise, vibration, and dust will not impact adjacent undeveloped sites within the NorthPoint development.
- The adjacent land uses to Option L, which are exclusively industrial in nature, are not sensitive to any noise, vibration, dust, and other construction impacts.

INSUFFICIENT COMMITMENTS TO IMPACT MITIGATION FOR THE BRICKBOTTOM CONDOMINIUMS

O-004-027 As the Draft EIR does not properly identify and evaluate the probable impacts of the mainline Green Line Extension and the Yard 8 Maintenance and Storage Facility on the Brickbottom Condominiums, effective measures to mitigate impacts cannot be identified. To the extent that project impacts are identified and evaluated in the Draft EIR, MassDOT has not committed to implement the full extent of measures required to effectively mitigate impacts on the Brickbottom Condominiums. The following sections of this memorandum identify specific mitigation recommend to mitigate impacts of the mainline Green Line Extension and the Yard 8 Maintenance and Storage Facility on the Brickbottom Condominiums (assuming Yard 8 continues to be MassDOT's preferred, or even a viable, alternative).

GENERAL

We recommend and request that MassDOT commit to the following:

required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

O-004-026

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-004-027

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction

O-004-028 1. MassDOT shall submit copies of the final all design plan submissions for the mainline Green Line Extension and the Union Square branch and the Yard 8 Maintenance and Storage Facility to Brickbottom Condominiums for review.

O-004-029 2. MassDOT shall reimburse the Brickbottom Condominium Association for the services of a professional engineer engaged by the Brickbottom Condominiums Association to review the design plan submissions on its behalf.

O-004-030 3. Should MassDOT select the Yard 8 Maintenance and Storage Facility Alternative over the objections of Brickbottom residents (and others), MassDOT shall submit to local Special Permit and Site Plan Review procedures and, in that context, shall submit copies of the Special Permit and Site Plan Review plans and application materials to the Brickbottom Condominiums Association for review prior to or concurrent with submission to the City of Somerville board(s).

O-004-031 4. MassDOT shall submit copies of any follow on environmental studies, supplemental data collection, and monitoring to the Brickbottom Condominium Association for review including without limitation copies of any documents pertaining to noise, vibration, air quality, hazardous materials, and historical resources.

O-004-032 5. MassDOT shall submit copies of all foundation engineering reports for walls or other components of the mainline Green Line Extension or the Union Square branch and for the Yard 8 Maintenance and Storage Facility to the Brickbottom Condominium Association for review and said studies shall include specific requirements for pile installation including alternative methods to minimize noise and vibration.

O-004-033 6. Should MassDOT select the Yard 8 Maintenance and Storage Facility Alternative, MassDOT shall prepare - in active coordination with Somerville officials and the Brickbottom Association – a long term Operations Plan for the facility addressing hours of operation, operational requirements to limit noise and vibration, lighting, maintenance and repair of the faculty and exterior operation areas and equipment.

LAND USE

No mitigation is proposed for land use impacts.

O-004-034 The Yard 8 Maintenance and Storage Facility is a prohibited use under the provisions of the Somerville Zoning Ordinance. Should MassDOT elect to proceed with the Yard 8 Maintenance and Storage Facility, MassDOT must (by law and through a commitment by MassDOT to comply with the Ordinance) petition the Board of Aldermen to amend the Zoning Ordinance to allow "Railroad Terminals and Yards, Including Operations Conducted Outside Enclosed Buildings" in the IA District. However, such an

monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

O-004-028

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and oher stakeholder concerns to the extent practical. Yard 8 is no longer MassDOT's preferred site for the maintenance facility, which is currently proposed for the Option L site.

O-004-029

While MassDOT intends to share appropriate design documents with interested parties, it is not MassDOT policy to reimburse individuals or their consultants for design reviews. The responsibility for review lies with the individuals.

O-004-030

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-031

All previous and future environmental documents, including but not limited to the DEIR/EA, FEIR, and Final EA, describe the environmental impacts resulting from the Proposed Project. Each of these documents will be made available to the public.

O-004-032

MassDOT will share electronic versions of appropriate design

O-004-034

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amendment may be precluded as "spot zoning" because it would be limited to one specific site and would benefit MassDOT individually.

We recommend and request that MassDOT commit to the following measures:

O-004-035 1. MassDOT should select the Mirror H or Option L location for the Maintenance and Storage Facility to avoid adverse impacts in terms of noise, vibration, mass and scale, visual quality, lighting, and barriers to pedestrian and vehicular circulation.

O-004-036 2. MassDOT should evaluate alternative designs for the Community Path including one or more alternative alignments along the southerly side of the mainline Green Line Extension which will afford direct access to the Community Path for Brickbottom residents. Construction of the Community Path should be integral with construction of the Green Line improvements.

O-004-037 3. Should MassDOT select the Yard 8 Maintenance and Storage Facility Alternative over the objections of Brickbottom residents, efforts should be made to minimize the impact of the facility by reevaluating the program as follows:

   a. The parking area should be minimized.

   b. The storage requirements should be reevaluated on a system wide basis with storage provided only for the minimum number of cars required for the northerly Extension of the Green Line.

   c. Efforts should be made to locate additional storage locations remote from Brickbottom where trains entering service prior to 7:00 AM and after 7:00 PM can be stored.

   d. The storage area, switches, and curved track segments should be moved farther away from Brickbottom.

   e. To the extent that the footprint of the maintenance and storage facility can be consolidated, the mainline Green Line Extension tracks should be moved away from the Brickbottom Condominiums.

O-004-038 4. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to formal presubmission consultation with Brickbottom Condominiums representatives and other neighborhood residents with respect to the architectural design of the Yard 8 Maintenance and Storage Facility

O-004-039 5. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to formal presubmission consultation with Brickbottom Condominiums representatives and other

documents to requesting individuals as they become available and are ready for release.

O-004-033

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-034

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-035

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-004-036

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is committed to working with the City of Somerville, residents and businesses in the

O-004-039 neighborhood residents with respect to the air rights development encapsulating the maintenance facility and the storage yard.

O-004-040
6. MassDOT should restrict the hours of operation of the Yard 8 maintenance facility to 7:00 AM to 7:00 PM weekdays, 9:00 AM to 7:00 PM on Saturday with no work on Sundays or legal holidays.

7. MassDOT should restrict the hours of operation of the Yard 8 storage facility to 7:00 AM to 7:00 PM. Alternative locations remote from the Brickbottom Condominiums should be identified and developed for storage operations prior to 7:00 AM and after 7:00 PM.

AIR QUALITY

The construction phase air quality mitigation measures set forth in Section 6 of the Draft EIR are not sufficient.

O-004-041 We recommend and request that MassDOT commit to additional measures as follows:

1. MassDOT should develop and implement a more detailed plan to control fugitive construction dust that includes the following:

   a. Commitments to revegetated or otherwise stabilize any are left disturbed for more than 30 days.

   b. Daily street sweeping of all streets within one quarter mile of construction entrances.

NOISE

O-004-042 The MassDOT commitment to mitigate noise impacts by providing noise mitigation in the form of noise barriers, home sound insulation, and rail lubrication to mitigate all moderate and severe noise impacts prior to completion of construction is generally appropriate but must be described in more detail as it relates to the Brickbottom Condominiums site.

The commitment to install continuously welded rail for light rail tracks prior to completion of construction is appropriate and will abate noise impacts of the mainline Green Line Extension and the Union Square tracks on the Brickbottom Condominiums.

We recommend and request that MassDOT commit to additional measures as follows:

Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to improve connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-004-037

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-038

Please see response to Comment O-004-037.

O-004-039

Please see response to Comment O-004-037.

O-004-040

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-004-041

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to



O-004-043

1. MassDOT should install sound deadening insulation and glazing for all units within the Brickbottom Condominiums that experience moderate of severe noise impacts.
2. MassDOT should provide for voluntary relocation and market rate purchase of any units where noise abatement measures fail to reduce interior noise levels below moderate impact.
3. MassDOT should commit to installing central air conditioning systems and air exchangers permitting windows to be closed at all times.
4. MassDOT should provide a monetary subsidy to offset the operating cost of air conditioning.
5. MassDOT should commit to replacing all building windows with windows of the same design to ensure that the façade retains a harmonious and unified appearance.
6. MassDOT should commit to providing a ground level noise barrier to protect the Brickbottom ground level courtyard. MassDOT should allow the Brickbottom Condominium representatives to determine the style, materials, color, and finish of the noise barrier.

O-004-044

7. MassDOT should select the Mirror H or Option L location for the Maintenance and Storage Facility to avoid adverse impacts of noise generated by construction and operation of the maintenance facility.

O-004-045

8. If the Mirror H Maintenance and Storage Facility Alternative or the Option L Maintenance and Storage Facility Alterative is chosen, MassDOT should commit to relocating the mainline Green Line Extension tracks further away from the Brickbottom Condominiums in order to decrease noise impacts.

O-004-046

9. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to the following:
    a. Consolidating the footprint of the maintenance and storage facility by minimizing parking and minimizing the size of the storage facility.
    b. Moving the storage area, switches, and curved track segments away from Brickbottom to minimize noise for Brickbottom residents.
    c. To the extent that the footprint of the maintenance and storage facility can be consolidated, move the mainline Green Line Extension tracks away from the Brickbottom Condominiums to minimize noise along the northeast property line.

eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

O-004-042

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

O-004-043

Please see response to Comment O-004-042.

O-004-044

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further

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O-004-047

10. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to enclosure of the maintenance facility and the storage facility with walls and roofs optionally as components of air rights development.

11. MassDOT should restrict the hours of operation of the Yard 8 maintenance facility to 7:00 AM to 7:00 PM weekdays, 9:00 AM to 7:00 PM on Saturday with no work on Sundays or legal holidays.

12. MassDOT should restrict the hours of operation of the Yard 8 storage facility to 7:00 AM to 7:00 PM. Alternative locations remote from the Brickbottom Condominiums should be identified and developed for storage operations prior to 7:00 AM and after 7:00 PM.

VIBRATION

O-004-048

The MassDOT commitment to mitigate vibration impacts by providing vibration mitigation in the form of ballast mats and special trackwork to mitigate vibration impacts prior to completion of construction is generally appropriate but must be described in more detail as applied to the Brickbottom Condominiums site.

We recommend and request that MassDOT commit to additional measures as follows:

O-004-049

1. In addition to the vibration mitigation rail section proposed in Location 1 along the northeasterly properly line of the Brickbottom Condominiums, MassDOT should provide an additional approximately 500 foot long vibration mitigation rail section adjacent to the Brickbottom Condominiums encompassing both tracks on the Union Square branch.

O-004-050

2. MassDOT should select the Mirror H or Option L location for the Maintenance and Storage Facility to avoid vibration impacts during construction and operation of the facility.

O-004-051

3. If the Mirror H Maintenance and Storage Facility Alternative or the Option L Maintenance and Storage Facility Alterative is chosen, MassDOT should commit to relocating the mainline Green Line Extension tracks further away from the Brickbottom Condominiums in order to decrease vibration impacts.

O-004-052

4. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to the following:

    a. Consolidating the footprint of the maintenance and storage facility by minimizing parking and minimizing the size of the storage facility.

consideration and Option L is identified as the preferred maintenance facility site.

O-004-045

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. During preliminary engineering MassDOT will consider opportunities to shift tracks farther from the Brickbottom Condominiums if possible.

O-004-046

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-047

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-052

b. Moving the storage area, switches, and curved track segments away from Brickbottom to minimize noise for Brickbottom residents.

c. To the extent that the footprint of the maintenance and storage facility can be consolidated, move the mainline Green Line Extension tracks away from the Brickbottom Condominiums to minimize noise along the northeast property line.'

O-004-053

d. Utilizing all feasible measures to avoid pile supported foundations at Yard 8 Maintenance and Storage Facility.

e. If pile supported foundations are to be used, using alternative techniques for the installation of piles such as hydraulic installation or bored piling installation.

HISTORICAL RESOURCES

The MassDOT commitment to mitigate impacts on historical resources by constructing noise barriers with materials and colors compatible with adjacent historic properties and by providing noise mitigation (sound insulation) for sensitive historic structures that cannot be protected using noise barriers prior is appropriate. The application of these methods to the Brickbottom Condominiums site is discussed in additional detail hereinafter.

O-004-054

1. MassDOT should commit to using all feasible methods to avoid land takings from the National Register eligible A&P Warehouse Building (Brickbottom Condominiums.)

O-004-055

2. MassDOT should use historically appropriate window designs for noise abatement. All building windows should be replaced with the same window design in order to preserve the harmonious and unified appearance of the façade.

O-004-056

3. MassDOT should select the Mirror H or Option L location for the Maintenance and Storage Facility to avoid adverse impacts on the National Register eligible A&P Warehouse Building (Brickbottom Condominiums.)

O-004-057

4. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should develop a facility design that minimizes indirect impacts on the National Register eligible A&P Warehouse Building (Brickbottom Condominiums) including a design that encloses the maintenance facility and the storage facility with walls and roofs.

O-004-048

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

O-004-049

Please see response to Comment O-004-048.

O-004-050

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-004-051

Please see response to Comment O-004-048.

O-004-052

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VISUAL IMPACTS

The MassDOT commitment to mitigate visual impacts by providing vegetation on and/or above retaining walls to minimize visual changes prior to the completion of construction is appropriate, as is the commitment to work with affected communities on design of noise barriers and vegetated walls prior to completion of construction. However, these measures are too limited to address visual impacts on the Brickbottom Condominiums. Additional measures are required to mitigate the impacts of the Yard 8 Maintenance and Storage Facility on the Brickbottom Condominiums.

We recommend and request that MassDOT commit to additional measures as follows:

O-004-058

1. MassDOT should select the Mirror H or Option L location for the Maintenance and Storage Facility to avoid adverse impacts in terms of noise, vibration, mass and scale, visual quality, lighting, and barriers to pedestrian and vehicular circulation.

2. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to the following:

O-004-059

   a. Formal presubmission consultation with Brickbottom Condominiums representatives and other neighborhood residents with respect to the architectural design of the Yard 8 Maintenance and Storage Facility;

   b. Enclosure of the maintenance facility and the storage facility with walls and roofs optionally as components of air rights development.

   c. Formal presubmission consultation with Brickbottom Condominiums representatives and other neighborhood residents with respect to the air rights development encapsulating the maintenance facility and the storage yard.

   d. Consolidating the footprint of the maintenance and storage facility and by moving the maintenance facility and the storage area away from Brickbottom.

CONSTRUCTION

We recommend and request that MassDOT commit to additional measures as follows:

O-004-060

1. MassDOT should commit to restrict the hours of construction work to 7:00 AM to 7:00 PM weekdays, 9:00 AM to 7:00 PM on Saturday with no work on Sundays or legal holidays.

storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-053

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-054

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts, consistent with the requirements of the Section 4(f) and Section 106 regulations.

O-004-055

As stated in Section 6.5.4.7 of the DEIR/EA, new doors, windows, or other insulating treatments will be appropriate for the historic property and meet the Secretary of the Interior's standards for rehabilitation.

O-004-056

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-061 2. MassDOT should develop and implement a more detailed plan to control fugitive construction dust.

O-004-062 3. MassDOT should develop and implement a more detailed plan for construction noise control.

O-004-063 4. MassDOT should commit to installing noise abatement measures as otherwise required at Brickbottom Condominiums prior to construction in order to have these measures in place to control construction phase noise.

O-004-064 5. MassDOT should provide Brickbottom Condominium representatives with 24 hour contact information for the construction superintendent responsible for all work in proximity to the Brickbottom Condominiums.

O-004-065 6. MassDOT should select the Mirror H or Option L location for the Maintenance and Storage Facility to avoid adverse impacts in terms of noise, vibration, mass and scale, visual quality, lighting, and barriers to pedestrian and vehicular circulation.

O-004-066 7. If the Yard 8 Maintenance and Storage Facility is selected, MassDOT should commit to utilizing all feasible measures to avoid pile supported foundations at Yard 8 Maintenance and Storage Facility.

O-004-067 8. If pile supported foundations are to be used, MassDOT should commit to using alternative techniques for pile installation such as hydraulic installation or bored piling installation.

COMPARATIVE EVALUATION OF IMPACTS FOR YARD 8 MAINTENANCE AND STORAGE FACILITY VERSES MIRROR H AND OPTION L ALTERNATIVES

O-004-068 Technical Memorandum, Green Line Extension Project Additional Maintenance Facility Alternatives Analysis contains a comparative evaluation of the impacts of the Yard 8 Maintenance and Storage Facility verses the Mirror H and the Mirror H and Option L Maintenance and Storage Facility Alternatives. This Technical Memorandum was prepared after issuance of the Draft EIR and has not been formally submitted for public comment as part of the Draft EIR review process. It underscores the point that the Draft EIR is wholly deficient in its review of alternatives for the siting of the Maintenance and Storage Yard Facilities. Moreover, it is also merely "preliminary" – and emphasizes the need for further review of these alternatives.

More specific comments on the Technical Memorandum follow Table 4-1.

O-004-057

Please see response to Comment O-004-054.

O-004-058

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-004-059

Please see response to Comment O-004-058.

O-004-060

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

O-004-061

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels,

Table 4-1 Comparison o... ...intenance Facility Alternatives

Criteria	Rating	Yard 8 Subarea	Rating	Mirror H Subarea	Rating	Option L Subarea
Location		Inner Belt Road, Somerville (fullpanel), 200 Inner Belt Road, Somerville (partial parcel - vacant land only)		MetroPoint development site ABC-DISC - Located partly in Cambridge and Somerville; MBTA BET facility, Boston		20 Third Avenue, Somerville (fullpanel); 48 Third Avenue, Somerville (fullpanel); 70 Inner Belt Road, Somerville (partial parcel - unused vacant land only); 200 Inner Belt Road, Somerville (partial parcel - small corner of vacant land only (would not preclude future planned construction))
Description		This alternative proposes a new maintenance facility to be located adjacent to the proposed Green Line alignment and accessed from Inner Belt Road in Somerville.		This alternative proposes a new maintenance facility partly on NorthPoint parcels C2/D&F and storage on Parcels A and B, and partly on MBTA land currently used for storage by BET		This alternative proposes a new maintenance facility to be located immediately adjacent to BET, outside the current BET fence line - along the southern and southeastern flings of the existing Inner Belt industrial area
Ability to meet the MBTA Maintenance Facility Program	-1	This alternative generally meets the 80-car storage program and approximately 100 employee parking spaces.	-1	This alternative generally meets the 80-car storage program and approximately 100 employee parking spaces.		This alternative generally meets the 80-car storage program and approximately 100 employee parking spaces
Order-of-Magnitude conceptual capital cost estimate ($2008)	0 0-1	Approximately $90 Million (Estimated cost is likely to substantially increase if the cost of "voiding the existing building permit is accurately quantified. Accordingly, the rating on Yard 8 should be revised to "-1.")	0	Approximately $80 Million	-1	Approximately $-$80 Million $90 Million. (See attached Tables 1 and 2)
Property impacts	-3 -3-5	This alternative requires the acquisition of approximately 8.6 acres of land, which is estimated at approximately $15 million. This alternative would impact the planned NorthPoint project site, which has received MEPA's environmental clearance and has begun construction. The project would need to be revised to reflect the market value and assessed valuation of the Brickbottom and Maintenance Facility. Accordingly, the rating should be revised to "-3."	-3	This alternative requires the acquisition of approximately 3.1 acres of Dev Ap parcels that would impact the planned NorthPoint project site, which has received MEPA's environmental clearance and has begun construction. Railcorp properties which is estimated at approximately $8 million. This alternative would need to be routed NorthPoint has also received	-4-8	This alternative requires the acquisition of approximately 10.2 acres of land and railroad rights-of-way, which is estimated at approximately $40 million. This alternative requires relocation of certain businesses, as well as demolition of non-existing buildings.
Operational impacts	-1	This alternative would generally support the Green Line operations, and would not have an impact on Pan Am Railways operations.	-1	This alternative would generally support the Green Line operations, and would not preclude existing railroad operations.	1+1	This alternative would generally support the Green Line operations, but and preclude maintain a level of functionality for its rail freight operations equivalent to that existing prior to removal of the Wiley track.
Compatibility with other transportation projects in the project area	+1	This alternative is compatible with the Urban Ring, Somerville Community Path, North-South Rail Link, and MBTA Fitchburg Commuter Rail Improvement projects.	-1	This alternative would preclude the Urban Ring, North-South Rail Link project and MBTA Fitchburg Commuter Rail Improvement projects. This alternative is compatible with Urban Ring and Somerville Community Path projects.	-1	This alternative is compatible with the Urban Ring, Somerville Community Path, North-South Rail Link, and MBTA Fitchburg Commuter Rail Improvement projects
Compatibility with existing land use	-1	The project area for this alternative is currently zoned for industrial use and would not require rezoning.	-1	The project area for this alternative is zoned for mixed-use including residential use and would not require rezoning for the maintenance facility within Cambridge	-1	The project area for this alternative is currently zoned for industrial use and would not require rezoning.
Future Economic Development Opportunities	-1	This alternative would likely not be compatible with long-term development goals.	-1	This alternative would likely not be compatible with long-term development goals.	0	This alternative would likely not preclude long-term development goals
Ability to meet project schedule	-1-1	A comprehensive evaluation including an environmental review was performed of this alternative, which was filed on October 15, 2008. Given that the neighborhood residents is expected to result in administrative and legal issues which will significantly delay the project.	-1	This alternative requires acquisition of land from the NorthPoint development project, which has completed the MEPA process and started construction, and would delay the Green Line Extension project schedule.	0+1	This alternative requires the acquisition and relocation of existing businesses, which is expected to result in administrative and legal issues which will significantly delay the project. Changes would be required to the alignment of the Green Line Extension project as the preferred alignment includes a station at this site. It is expected to delay the Green Line Extension project schedule.
Environmental impacts	-1	An assessment in the DEIR/EA, on impacts to water, land, wetlands, no direct losses to businesses and jobs, and no direct effects on EJ or environmental justice populations are anticipated. There would be no accurate estimate, impacts from noise after mitigation (sound insulation) are expected to be minimal. Potential archaeological concerns. The site was historically used as a rail yard. Potential contamination issues with former uses, Brickbottom Artists Lofts, which has 185 residential units, is in close proximity to the site.	-1	Based on a preliminary evaluation, no impacts to public, wetlands, or historic resources; no direct losses to businesses and jobs are anticipated. With respect to the NorthPoint development would have to be renegotiated, with the City of Cambridge. This alternative would preclude the NorthPoint Development Project. Area residential properties include the NorthPoint Development Site, 3 Triangle Buildings (239 units), Archdrive (650 units) and Glass Factory (184 units)	0	Based on a preliminary evaluation, no impacts to public, wetlands, or historic resources; no direct losses to businesses and jobs are anticipated. There would be no accurate estimate, impacts from noise after mitigation (sound insulation) are expected to be minimal. Potential archaeological concerns. This site is likely to have underground utilities, is likely to have hazardous materials impacts. This site would have direct loss of businesses and jobs. Environmental Justice populations would be affected. Business displacements or relocations to City of Somerville locations would be anticipated, with the would require disposal of solid waste, may include residential, industrial or hazardous materials, may require additional clean-up costs.
Intersection interruptions and	-1	There are some limitations on the current topography which could present challenges for constructing streets and access roadways between adjacent neighborhoods.	0	There are no fatal defects on the current topography which would prevent the constructing of streets and access roadways between adjacent neighborhoods.	0	There are no fatal defects on the current topography which would prevent from constructing streets and access roadways between adjacent neighborhoods
TOTAL	9-14		-9		0-5	

and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

O-004-061

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

O-004-062

Please see response to Comment O-004-061.

O-004-063

Please see response to Comment O-004-061.

O-004-064

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project, including construction.

O-004-065

An expanded technical and environmental analysis of the light rail



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The comparative evaluation of impacts contained in the Technical Memorandum is summarized in "Table 4-1 Comparison of Maintenance Facility Alternatives." As Table 4-1 may prove to be a critical element considered by MassDOT in determining whether a new preferred maintenance and storage facility should be selected, an accurate and objective evaluation of impacts should be provided. Based upon our evaluation of project impacts as set forth in the Technical Memorandum, Green Line Extension Project Additional Maintenance Facility Alternatives Analysis and the Draft EIR, Professional Services Corporation (PSC) recommends that the comparative evaluation of impacts as summarized in Table 4-1 be revised as set forth hereinafter.

O-004-069

The values in Table 4-1 are ranked from -1 to 0 to +1. For "Order-of-Magnitude Conceptual Capital Cost Estimate ($2008)" Yard 8 is ranked "0." However, one of the parcels to be acquired has already been issued a building permit for a six story building and the Technical Memorandum acknowledges that the building permit must be "voided." It is unlikely, that the cost of "voiding" this building permit is accurately reflected in the parcel acquisition cost. The method of deterring parcel acquisition and in particular the cost of "voiding" the building permit should be documented.

With respect to "Order-of-Magnitude Conceptual Capital Cost Estimate ($2008)," Option L is ranked "-1," principally because of parcel acquisition cost. PSC independently calculated parcel acquisition cost using published Somerville Assessors data. As indicated in the attached Table 1, the property acquisition cost for Option L is approximately $16 million based upon published assessor's data. As indicated in the attached Table 2, the Order of Magnitude Conceptual Capital Cost Estimate for Option L is $94 million, which is the same order of magnitude as the cost of Yard 8 and Mirror H Alternatives. Accordingly, it is appropriate to revise the rank of Option L as "0" in Table 4-1.

The "property impacts" of the Yard 8 Maintenance and Storage Facility were assigned a ranking of "0" in Table 4-1. However, this ranking does not reflect the adverse effects of construction of the Yard 8 Maintenance and Storage Facility on the market value and assessment of units located in the Brickbottom Condominiums. Property values will be adversely impacted by noise, vibration, and degraded views caused by the Yard 8 Maintenance and Storage Facility. Decreased market value will directly impact Brickbottom residents. As the total assessed valuation of Brickbottom units exceeds $40 million, any measurable decrease in assessed values will also adversely impact tax revenues to the City of Somerville. Accordingly, it is appropriate revise the ranking of the "property Impacts" of Yard 8 Maintenance and Storage Facility from "0" to "-1."

The "property impacts" of Option L are ranked as "-1" based in substantial part upon the stated acquisition cost of $52 million. However as indicated in the attached Table 1, the anticipated property acquisition cost should be revised from $52 million to $16 million. Based upon the corrected valuation of $16 million, the assigned ranking for the "property impacts" of Option L should be revised from "-1" to "0."

storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-004-066

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-004-067

The DEIR/EA and FEIR include conceptual Project designs. Designs for the storage and maintenance facility will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-004-068

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance

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The "operational impacts" of Option L are ranked as "-1" because it would have an impact on Pan Am Railways operations. However, reactivation of the Yard 10 lead would provide a level of functionality for Pan Am Railway freight operations that is functionally equivalent to that existing prior to removal of the Wiley track. Accordingly, the assigned ranking for the "operational impacts" of Option L should be revised from "-1" to "+1."

The ability to meet project schedule is ranked as "+1" for Yard 8. However opposition by the City of Somerville and neighborhood residents is expected to result in administrative and legal review which will significantly delay the project. Accordingly, the assigned ranking for "ability to meet project schedule" for Yard 8 should be revised from "+1" to "-1."

The ability to meet project schedule is ranked as "0" for Option L; however, the text supporting the ranking is inconsistent with the ranking assigned. The paragraph concludes "…selection of this site is not expected to delay the Green Line Extension project schedule." Accordingly, the assigned ranking for "ability to meet project schedule" for Option L should be revised from "0" to "+1."

While the criteria listed in Table 4-1 are not all of equivalent importance and cannot effectively be quantitatively summarized, the values in Table 4-1 were nonetheless totaled by VHB/Vanasse Hangen Brustlin, Inc. and PB Americas, Inc. and serve to provide a generalized indication of the relative merits of the three maintenance and storage facility alternatives. Originally rankings for Yard 8 summed to 0 with negative and positive values offsetting. Originally the rankings for Mirror H summed to -3 and for Option L summed to 0. Using these rankings Yard 8 and Option L were equivalent and Mirror H was less consistent with the criteria specified. With the revised rankings set forth above, Yard 8 sum to -4, Mirror H sums to -3, and Option L sums to +5. Using the revised rankings, Option L is clearly the preferred Maintenance and Storage Facility Alternative.

facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-004-069

Please see response to Comment O-004-068.

ATTACHMENTS

Table 1 - Option L Property Acquisition Cost

Table 2 - Revised Table 3-6 - Order of Magnitude Conceptual Capital Cost Estimate for Option L (Revised PSC 12/18/2009)

Table 1 - Option L Property Acquisition Cost

Property	M.S. Walker Wholesale Distribution	Type of Acquisition	Total Area (acres) [1]	Land Value Total Parcel [1]	Land Value per Acre	Acres to be Acquired [2]	Total Acquisition Cost
20 Third Avenue	M.S. Walker Wholesale Distribution	Full					$5,891,000
48 Third Avenue	Digital Publishing Solutions	Full					$6,752,700
70 Innerbelt Road	ORG West Parking Lot	Land Only	7.40	$9,345,200	$1,263,200	1.2	$1,516,000
200 Innerbelt Rd.	Fine Arts Storage Partners	Land Only	8.46	$9,345,200	$1,010,600	1.6	$1,617,000
Total Cost							**$15,776,700**

[1] Source: Somerville Assessor's Data Base 2009
[2] Source: Technical Memorandum, Green Line Extension Project, Additional Maintenance Facility Alternatives Analysis, prepared by VHB/ Vanasse Hangen Brustlin, Inc. and PB Americas, Inc.

Table 2 ***Revised Table 3-6 - Order of Magnitude Conceptual Capital Cost Estimate for Option L*** **(Revised PSC 12/18/2009)**

Real Estate		
Acquisition	$16	M
Building	$38	M
Track	$33	M
Infrastructure	$2	M
Earthwork	$5	M
Total	**$94**	**M**

[1] Source: Technical Memorandum, Green Line Extension Project, Additional Maintenance Facility Alternatives analysis, VHB/ Vanasse Hangen Brustlin, Inc. and PB Americas, Inc.

[2] Source: Refer to Table 1. Real estate acquisition costs are based on 2009 assessment data.

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LAW OFFICES OF

JEFFREY L. ROELOFS, P.C.

ENVIRONMENTAL AND LAND USE LAW

Newburyport | Boston

Jeffrey L. Roelofs
30 Green Street
Newburyport, MA 01950

Office 978-462-7600
Cell 978-376-1396
Fax 978-462-7610
jlr@roelofslaw.com
www.roelofslaw.com

January 8, 2010

By Fax 617-626-1181 and
By Email (holly.s.johnson@state.ma.us)
Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston MA 02114

RE: EEA #13886 – Green Line Extension Project
Comments on Draft Environmental Impact Report

Dear Secretary Bowles and Ms. Johnson:

I write on behalf of the Brickbottom Condominium Trust and the 220+ residents of the Brickbottom residential/artist community (collectively, "Brickbottom") to submit comments on the Draft Environmental Impact Report ("DEIR") submitted in connection with the Green Line Extension Project (the "Project"). These comments supplement the many comments already submitted by and on behalf of Brickbottom, including (1) the comment letter submitted by Brickbottom's Trustees dated January 6, 2010 ("Brickbottom's 1/6/10 Letter") and (2) the Memorandum submitted by an engineer retained by Brickbottom – Thomas C. Houston, AICP, PE, Professional Services Corporation PC ("PSC") – dated January 7, 2010 ("PSC's 1/7/10 Memorandum").

INTRODUCTION

As discussed more fully in Brickbottom's 1/6/10 Letter and PSC's 1/7/10 Memorandum, there are many significant deficiencies in the Draft EIR, in MassDOT's evaluation methodologies and in the review process leading to the Draft EIR. Brickbottom's greatest concern is with respect to MassDOT's proposed construction and operation of a maintenance facility and a train storage yard on "Yard 8," adjacent to Brickbottom's property. Siting those facilities at Yard 8 will result in severe and disproportionate adverse impacts to Brickbottom (and the surrounding community) – impacts that MassDOT has not yet sufficiently evaluated and has understated.

O-005-001

As discussed more fully in Brickbottom's 1/6/10 Letter and PSC's 1/7/10 Memorandum, MassDOT's preference for siting the maintenance and storage facilities at Yard 8 was prematurely developed. Its preference was developed with no meaningful input from the impacted community and (1) prior to completing a meaningful analysis of other feasible alternatives, (2) prior to sufficiently evaluating and comparing impacts associated with the Yard 8 site and other alternative sites (including cumulative impacts), and (3) prior to evaluating the extent to which the significant impacts to Brickbottom could be effectively mitigated, or not.

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O-005-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-005-002 **In short, the DEIR and the process leading to the DEIR fall short of what is required by MEPA. Further MEPA review should be required (and, as a matter law, must be required).**

STATUTORY AND REGULATORY FRAMEWORK

The Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61-62H ("MEPA"), and implementing regulations at 301 CMR 11.00 require all agencies, in carrying out their activities, to use "all practical means and measures to minimize damage to the environment." G.L. c. 30, § 61. Any determination made by a state agency "shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact." Id. The section 61 finding is to be based upon an environmental impact report, where required (as here), under G.L. c. 30, § 62. See Secretary of Environmental Affairs v. Massachusetts Port Authority, 366 Mass. 755, 778 (1975).

An agency must do more than rationalize decisions already made – as MassDOT has attempted to do here. For projects subject to MEPA, the agency must first proceed through MEPA's review process, supervised by the Secretary, "for thorough consideration of the potential environmental impact" of the project. G.L. c. 30 § 61. As part of that process, the agency must prepare an environmental impact report ("EIR") which describes:

> the nature and extent of the proposed project and its environmental impact; all measures being utilized to minimize environmental damage; any adverse short-term and long-term environmental consequences which cannot be avoided should the project be undertaken; and reasonable alternatives to the proposed project and their environmental consequences....

G.L. c. 30 § 62B (emphasis added). The EIR "shall be prepared and disseminated to inform the originating or permitting agency, reviewing agencies, the appropriate regional planning commission, the attorney general and the public of the environmental consequences of state actions and the alternatives thereto prior to any commitment of state funds for and prior to the commencement of the project if undertaken by an agency ...." Id.

The MEPA regulations require the EIR to include, among other things:

- "[a] description and analysis of ... all feasible alternatives [to the Project], including but not limited to those indicated in the Scope [of the Project as set forth by the Secretary]." 301 CMR 11.07(6)(f)(1) (emphasis added).
- "an analysis of the principal differences among the feasible alternatives . . . particularly regarding potential environmental impacts." 301 CMR 11.07(6)(f)(4).

O-005-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

- a "detailed description and assessment of the negative and positive potential environmental impacts of the Project and its alternatives." 301 CMR 11.07(6)(h).

- "a description and assessment of … measures and management techniques designed to limit negative environmental impacts or to cause positive environmental impacts during development and operation of a Project," requiring that the EIR "specify in detail: the measures to be taken . . . to avoid, minimize, and mitigate potential environmental impacts …." 301 CMR 11.07(6)(j).

- a discussion of "alternatives to the proposed mitigation measures considered by the Proponent or suggested in comments by any Agency or Person, noting the relative benefits and costs of these alternative mitigation measures." 301 CMR 11.07(6)(j).

- proposed Section 61 Findings that "specify in detail: all feasible measures to be taken . . . to avoid Damage to the Environment or, to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable. 301 CMR 11.07(6)(k).

"The purpose of [MEPA] is to require that impact reports be prepared before an irreversible commitment to a project is made." Secretary of Environmental Affairs v. Massachusetts Port Authority, 366 Mass. 755, 776 (1975). Defects in the environmental review process constitute "harm" and that injury is almost inevitably irreparable once an agency becomes heavily invested in a project.[1]

As recently emphasized by the Massachusetts Supreme Judicial Court ("SJC") in Allen v. Boston Redevelopment Authority, 450 Mass. 242, 257 (2007):

> The overarching purpose of MEPA and the regulations promulgated thereunder is "to provide *meaningful* opportunities for public review of the potential environmental impacts of Projects for which [State] Agency Action is required, and to assist each Agency in using ... all feasible means to avoid Damage to the Environment or, to the extent Damage to the

[1] Commonwealth of Massachusetts v. Watt, 716 F.2d 846, 952 (1st Cir. 1983) ("In the present case, the plaintiffs would suffer harm if they were denied an injunction, if the lease sale took place, and if the Court then held that a supplemental EIS was required.... [The] chain of bureaucratic commitment...will become progressively harder to undo the longer it continues. Once large bureaucracies are committed to a course of action, it is difficult to change that course - even if new, or more thorough, NEPA statements are prepared and the agency is told to "redecide."..."). Accord, Sierra Club v. Marsh, 872 F.2d 497, 500-504 (1st Cir. 1989) ("[T]he difficulty of stopping a bureaucratic steamroller, once started, ...[is] a perfectly proper factor for a district court to take into account in assessing" a motion for preliminary injunctive relief and that "when a decision to which NEPA obligations attach is made without the informed environmental consideration that NEPA requires, the harm that NEPA intends to prevent has been suffered"); Environmental Defense Fund v. Tennessee Valley Authority, 468 F.2d 1164, 1183-84 (6th Cir. 1972); Jones v. District of Columbia Redevelopment Land Agency, 499 F.2d 502, 511 (D.C. Cir. 1974); Arlington Coalition on Transportation v. Volpe, 458 F.2d 1323, 1332 (4th 1972).

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> Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable" (emphasis added). 301 Code Mass. Regs. § 11.01(1)(a). See G.L. c. 30, § 61.

In Allen, the SJC recognized that the Secretary has "considerable discretion over the scope of an EIR." However, the SJC also admonished that "[t]he process by which the information is gathered, identified, and applied to the statutory standards under MEPA must be logical, and not arbitrary or capricious." Allen, 450 Mass. at 254. Ultimately, in Allen, the SJC held that the Final EIR issued for the Biolab facility was arbitrary and capricious in failing to consider likely damage to the environment caused by the release of a contagious pathogen and that the Secretary's Certificate on that Final EIR was arbitrary and capricious due to the developer's failure to address alternative locations.

DECEMBER 1, 2006 CERTIFICATE ON EXPANDED ENVIRONMENTAL NOTIFICATION FORM ("EENF")

The December 1, 2006 Certificate issued on the EENF for this Project echoed and supplemented the detailed statutory and regulatory requirements discussed above. It established a broad and detailed set of substantive and procedural requirements applicable to the ongoing MEPA review process for this Project and required MassDOT to "comprehensively address" those requirements.

The scope of MEPA review required for this Project was appropriately broad, reflecting the magnitude and importance of this Project and the significant environmental impacts associated with it. For example, the Certificate noted the following:

- "This project is a hallmark of the Commonwealth's commitment to the principles and practice off smart growth." (EENF Certificate, p. 1).
- "For this project to achieve its potential . . . [the agencies] must design the project carefully and coordinate proactively and effectively with state and city agencies, citizens, local businesses and other stakeholders during all aspects of the project – planning, design and construction." (EENF Certificate, p. 1).
- "The project should be designed to maximize benefits for local residents while preserving the integrity and character of existing neighborhoods." (EENF Certificate, p. 2).
- "Commenters want to protect and enhance the character and vitality of this corridor, its neighborhoods and business centers ...." (EENF Certificate, p. 2).
- "Even the most committed supporters of this project identify the need for additional analysis, information and commitment to mitigation measures to ensure the success of this long-term improvement." (EENF Certificate, p. 2).

The Certificate then proceeded to impose a broad set of requirements for the continued MEPA process – requiring comprehensive analyses of Project alternatives, impacts and specific measures to avoid, minimize and mitigate impacts.

NEED FOR FURTHER MEPA REVIEW

Although the EENF Certificate opened the door to the possibility of the DEIR being treated as an FEIR,[2] MassDOT has not adequately addressed the Scope established in the EENF Certificate or otherwise met the statutory and regulatory requirements for FEIRs – as discussed in detail in Brickbottom's 1/6/10 Letter and PSC's 1/7/10 Memorandum. Accordingly, further MEPA review should be required.

Brickbottom's requests with respect to the scope of further MEPA review that should be required are discussed in detail in Brickbottom's 1/6/10 Letter and PSC's 1/7/10 Memorandum. They are not repeated or comprehensively summarized here. Among the requests discussed in those submittals (without limitation) are that MassDOT and the MBTA should be required – in connection with its preparation of an FEIR – to do the following:

O-005-003

- Re-evaluate and describe in detail their justification for their stated "needs" with respect to the maintenance facility and storage yard facilities (including footprints, design features, etc… which were the bases for ruling out many potential alternative sites for these facilities). These facilities should be designed to accommodate only the needs of the Green Line Extension, not to address the additional needs and shortcomings of the *existing* Green Line facilities.
    - In the event MassDOT/MBTA continue to seek to address system-wide maintenance and storage needs and shortcomings through these proposed facilities – particularly if they are proposed for Yard 8 – they should be required to conduct a searching reexamination of all feasible alternatives, including evaluation of sites (or combination of sites) elsewhere in the Green Line system, not merely those along the Green Line Extension.

O-005-004

- Complete their ongoing identification and evaluation of feasible alternatives to the siting of the maintenance and storage facilities at Yard 8, and, in that regard,
    - Remove Yard 8 from further consideration in light of the overwhelming local opposition to that alternative, its inconsistency with local planning initiatives and smart growth principles, and the significant and disproportionate adverse impacts that siting these facilities at Yard 8 would have on Brickbottom and the surrounding community.

[2] The Certificate noted (p. 4) that "[i]f the DEIR provides a reasonably complete and stand-alone description and analysis of the project, project alternatives and environmental impacts, and adequately addresses mitigation, the regulations allow the DEIR to be reviewed as an FEIR." It then stated that if the DEIR is "thorough" and MassDOT and the MBTA "comprehensively address the Scope" of the EENF Certificate, the DEIR may be deemed adequate to serve as the FEIR.

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O-005-003

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

O-005-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes

O-005-004

- Continue evaluation of the Mirror H and Option L alternatives that were identified in, but not evaluated prior to, preparation of the DEIR.
- Further evaluate potential alternatives that utilize land currently used for rail facilities (BET) and those that involve separating the maintenance facility from the storage yard – each of which separately requires a smaller footprint than the combination of facilities (of course), rendering feasible the use of smaller sites for each facility and greater design flexibility (for these facilities and the track layouts).
- Identify, evaluate more thoroughly and compare the impacts associated with each feasible alternative – including cumulative impacts with consideration of other aspects of the Project and existing rail facilities.
- Identify and evaluate more thoroughly the costs and scheduling issues associated with each alternative – accounting for potential costs and delays associated with reasonably anticipated litigation.
- Identify and evaluate the extent to which each alternative is consistent with local planning initiatives and smart growth principles.
- Revisit and describe in detail the factors considered, and the weight given to each factor, in evaluating alternatives and developing the siting preference – and afford greater weight to impacts to existing residential buildings and uses, such as Brickbottom, than to potential impacts to contemplated future residential spaces (such as those at the Northpoint development).

➢ Evaluate further the impacts on Brickbottom associated with the Project – including impacts from the maintenance facility, storage yard and track configurations ultimately proposed in the FEIR,

O-005-005
- including cumulative impacts with consideration of existing rail infrastructure in the area,

O-005-006
- including impacts to indoor and outdoors spaces at Brickbottom,

O-005-007
- including impacts associated with the proposed taking of land from Brickbottom.

O-005-008
➢ Identify, evaluate and describe in detail specific siting, design and configuration measures considered and proposed to effectively minimize such impacts.

O-005-009
➢ Identify, evaluate and describe in detail specific measures considered and proposed to effectively mitigate such impacts.

proposed mitigation measures and related monitoring after the construction phase.

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities.

O-005-005

An expanded analysis of potential noise and vibration impacts at the Brickbottom Artists Buildings is included in FEIR Chapter 8. These projections take into account the collective impacts of rail uses in the area.

O-005-006

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds.

O-005-007

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

O-005-008

Please see response to Comment O-005-004.

O-005-009

- This evaluation should include site-specific evaluation of existing conditions at Brickbottom and projected impacts to Brickbottom -- indoors and outdoors, and during and after construction.
- It should result in a detailed schedule of mitigation measures determined, after evaluation, to effectively mitigate Project-related impacts in a manner agreeable to Brickbottom.

O-005-010

- Attempt in good faith to negotiate Mitigation Agreements with the impacted communities and Brickbottom, with such agreements serving to more clearly specify enforceable mitigation goals, measures and deadlines and to establish an agreed upon process by which the community and affected abutters can seek redress if those goals, measures and/or deadlines are not met relating to construction and post-construction activities.

O-005-011

- For any impacts that are not addressed through Mitigation Agreements, identify and commit unilaterally to more clearly specified and enforceable mitigation goals, measures and deadlines and identify and commit to establishing a process by which the community and affected abutters can seek redress if those goals, measures and/or deadlines are not met – relating to construction and post-construction activities.

O-005-012

- Evaluate further designs and processes for construction of the Community Path in conjunction with this Project, including designs that would accomplish more direct access to/from Brickbottom than the designs including in the DEIR.

O-005-013

- Evaluate further Brickbottom/Washington Street Station designs that would provide greater access to pedestrians and bus commuters (with access from both sides of the station).

To be clear, the above set of scoping requests supplements the more comprehensive set of requests that Brickbottom has submitted through Brickbottom's 1/6/10 Letter and PSC's 1/7/10 Memorandum.

Thank you for your consideration of these comments.

Sincerely,

Jeffrey L. Roelofs

cc: Kate Fichter (MassDOT, by email)
Monica Lamboy (City of Somerville, by email)
Noah Chesnin (CLF, by email)
Brickbottom Condominium Trust (by email)
Thomas C. Houston, AICP, PE (by email)

O-005-009

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. The mitigation measures and procedures for implementation required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

O-005-010

The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. As the Project advances into preliminary engineering and further detailed designs on mitigation are developed, MassDOT will work with abutters, as appropriate, to consider recommendations for mitigation.

O-005-011

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

O-005-012

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However,

the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-005-013

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

RECEIVED
JAN 8 2010
MEPA

change.org

To: Secretary Ian Bowles/Holly Johnson (MEPA Analyst)

Subject: **Regarding EEA #13886 Green Line extension DEIR**

Letter: Dear Secretary Ian Bowles,,

The community members engaged with CCP would like to see all decisions related to the planning of the Green Line and the land use in the ½ mile areas around the 7 proposed stations to reflect this list of Corridor Core Principles. Please see third paragraph for list of Core Principles and corresponding suggested changes to Draft Environmental Impact Report (DEIR).

O-006-001

The Community Corridor Planning project, a grassroots effort to engage community members in the land use planning along the Green Line extension, has brought together hundreds of people to frame a list of core principles to guide their recommendations for land use along the extension in upcoming months. We ask that these principles be taken into consideration as the Mass. Department of Transportation finalizes its Environmental Impact Report.

Core Community Principles for
Neighborhood Development Along the Green Line Corridor

• More Local Jobs: We want a fixed percentage of respectable jobs of all types with good wages and benefits for Somerville residents, from construction to permanent.

• Increase Commercial and Economic Development: We want to see the creation of squares as destinations, with careful attention to mixed use of commercial/residential, reuse of buildings, and economic development to increase the tax base.
o Draft Environmental Impact Report (DEIR) does not address Department of Transportation (DOT) commitment to economic development
o New MA DOT is supposed to work with Secretary of Economic Affairs to promote station location and design that promotes economic development and the community needs to show MA DOT how to do this – to change the paradigm pro-actively.

• Improve the Green Environment: We want a safe, environmentally friendly neighborhood with more green space, trees, and gardens; reduction of noise; avoidance of light pollution; and prevention of toxic chemicals in the air.
o Response to DEIR: Given this principle, it is important that more attention be given to:
o Noise of operations
o Mitigation during construction for noise, vibration, etc.
o How close the tracks will be to the Brickbottom Building and other buildings along the right of way
o The need to involve neighborhoods affected regarding noise and vibration
o Recommendation that testing be done immediately after project begins to determine if estimates for vibration and noise done for the DEIR are accurate.
o Possibly transfer at Ball Square but only if Commuter rail is electric not diesel because of the pollution it would create for neighbors
o Rep. Provost noted in comments made that diesel trains should not stop in Somerville. This should only be permitted if trains are electrified
o Consider dual-mode conversion of existing commuter trains
• Encourage Walking and Biking: We want to encourage walking and cycling, through safe, bike/pedestrian friendly design of streets and paths around and between stations.
o Pedestrian accessibility is poor for the station designs in the DEIR
o The design required in the MEPA Scope (EENF) does not sufficiently address the detailed concerns and requirements for each station.
o In the DEIR design and engineering is insufficient for moving the project to a final EIR because of a range of unaddressed issues (i.e., station design, siting, bike parking, community path integration)
o Bike access and bike parking at all stations needs to be improved.
o New Light Rail Vehicles (LRVs) should be designed to accommodate bicycles (like Portland LRVs)
o The Community Path and its important station connections must be designed and

O-006-001

MassDOT has reviewed and considered the “Core Community Principles” for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

• Create Community Gathering Spaces: We want both indoor and outdoor safe, public gathering spaces for community members.

• Improve Access: We want above standard, safe access to and between stations for people with disabilities, strollers, and pedestrians in general

• Community Involvement: We want to make sure residents are included on an ongoing basis in the planning, design, and zoning changes to the stations and areas around them. Youth, artists, and others should help design stations, with attention to amenities. We need an easy and clear process for residents to address problems as they come up, with ways of immediately resolving unseen impacts.
o Ongoing Community participation in the next phase (presumed to be done as a design/build project) is necessary
o Public involvement will help to keep decision-making public (transparency)
o Need to have a field office that residents can go to with concerns on an ongoing basis
o Need neighborhood based community groups to be involved in planning around each station,
• Connecting Buses and Trains: We want to ensure inter-modal access between neighborhoods and stations, for new train service to be adequate and speedy, and for existing bus lines to continue to serve areas not connected by train.
o Need opportunity for future connection with other lines, such as Red Line at Porter Square.
o Several stations do not show bus stops, or nearest bus stop is located outside of station. Would be helpful to design station and alter bus route to allow for stops at the stations.

• Keep and Add Local Businesses: We want locally owned, culturally diverse, clean businesses in commercial areas with employees who live in Somerville.

• Keep Somerville Affordable: We want to make sure people of all economic means have the ability to afford housing and living costs, so that Somerville residents, such as child care workers, cab drivers, local business employees and others can stay here affordably.

• Maintain Our Diversity: Preserve and encourage economic and ethnic diversity of residents and businesses.

O-006-002

The state needs to plan all transportation projects on the basis of guiding principles for Transit Oriented Develoment (TOD), smart growth and quality of live impacts. For example, TOD and land use are the planning and organizing focus of the South Coast Rail project, but have been ignored in the Green Line extension planning despite the requirement by the Secretary to address these concerns in the EENF.

Signed By:

Name	Location	Date
kenneth knoppik	boca raton, FL	12/07/2009
Lisa Gimbel	Somerville, MA	12/07/2009
Irene Glassman	Jamaica Plain, MA	12/07/2009
Marta Isajiw	Somerville, MA	12/07/2009
Ann Cawley	Saint Joseph, MO	12/07/2009
Christina Jones	Wichita, KS	12/08/2009
matt shuman	Cambridge, MA	12/08/2009
Kevin Silvey	Seminole, FL	12/08/2009
Cecily Harwitt	Somerville, MA	12/08/2009
Jennifer Lawrence	Somerville, MA	12/08/2009

O-006-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Mary Regan	Somerville, MA	12/08/2009
Meridith Levy	Somerville, MA	12/08/2009
Matthew Cloner	Seattle, WA	12/08/2009
james m nordlund	Fargo, ND	12/08/2009
Elisabeth Kelly	Washington, DC	12/10/2009
Colin Barr	cambridge, MA	12/10/2009
Matan BenYishay	Somerville, MA	12/10/2009
suzanne boucher	somerville, MA	12/10/2009
Erica Schwarz	Somerville, MA	12/10/2009
Melissa McWhinney	Somerville, MA	12/10/2009
barbara cassesso	somerville, MA	12/10/2009
Jennifer Hall	Greeneville, TN	12/11/2009
Katie Anthony	Cambridge, MA	12/11/2009
NICK J	Toronto, NY	12/11/2009
jake wolfhart Peace Dude	Capitan, NM	12/11/2009
Ezra Glenn	Somerville, MA	12/11/2009
Colleen Chaos	Baltimore, MD	12/11/2009
Anneke Hut	Amersfoort, Netherlands	12/11/2009
Rev Bookburn	Collingswood, NJ	12/11/2009
Maria F.	Verona, Italy	12/12/2009
Kate Selden	Somerville, MA	12/12/2009
Joan E Loza Mobry	Madison, WI	12/12/2009
Christiane Henker	Bad Laer, Germany	12/12/2009
Ginger Geronimo	Birmingham, AL	12/13/2009
Kim Carter	Van Wert, OH	12/13/2009
Ingrid Peeters	Torremolinos, Spain	12/13/2009
Julia Petipas	Somerville, MA	12/13/2009
Lauren Bell	Somerville, MA	12/13/2009
janine lotti	somerville, MA	12/14/2009
Suzanne DesRosiers	Somerville, MA	12/14/2009
annie silverman	som, MA	12/15/2009
Juliette Rooney-Varga	Somerville, MA	12/15/2009
Mark Sullivan	Somerville, MA	12/15/2009
Maura Schorr Beaufait	Somerville, MA	12/15/2009
matthew hochman	somerville, MA	12/15/2009
Naomi Sobel	Somerville, MA	12/15/2009
Laura Studley	Cambridge, MA	12/15/2009
Pru Chapman	Somerville, MA	12/15/2009
Jesse Purvis	Somerville, MA	12/15/2009

Stefanie Lynch	Somerville, MA	12/15/2009
Mara Vorhees	Somerville, MA	12/15/2009
Laura Slapikoff	Somerville, MA	12/15/2009
Naomi Slagowski	Somerville, MA	12/15/2009
Eric Becker	Somerville, MA	12/16/2009
Michele Biscoe	Somerville, MA	12/16/2009
Gordon Jacobs	West Somerville, MA	12/16/2009
Elizabeth Murphy	somerville, MA	12/16/2009
Vanessa Rule	Somerville, MA	12/16/2009
Ceallaigh Reddy	Somerville, MA	12/16/2009
Justine Deutsch	Somerville, MA	12/16/2009
Muhammed Jargboh-Sillah	Somerville, MA	12/16/2009
Steve Laferriere	Jamaica Plain, MA	12/16/2009
Kate Jordan	Somerville, MA	12/16/2009
Jonathan Raiton	East Boston, MA	12/16/2009
Thais DeMarco	Jamaica Plain, MA	12/17/2009
Maureen Barillaro	Somerville, MA	12/17/2009
John Resig	Somerville, MA	12/20/2009
Adam Chamberlain	Somerville, MA	12/21/2009
Sarah Thibodeau	Somerville, MA	12/21/2009
Thierry Jeannot Marcellus	medford, MA	12/21/2009
Aparna Das	Somerville, MA	12/22/2009
Elmy Bonilla	Somerville, MA	12/22/2009
Courtney Croteau	Somerville, MA	12/28/2009
Nora Chovanec	Somerville, MA	12/28/2009
Matthew Evans	Somerville, MA	12/29/2009
James Wrigley	Somerville, MA	12/30/2009
Nancy Bernhard	Somerville, MA	12/31/2009
Richie Eldridge	Revere, MA	12/31/2009
Jessica Zeigler	Somerville, MA	12/31/2009
Karen Gardner	Somerville, MA	01/01/2010
Amanda Rush	Somerville, MA	01/03/2010
Alex Lessin	Somerville, MA	01/03/2010
Josh Wairi	Somerville, MA	01/03/2010
Alison Cromer	Somerville, MA	01/04/2010
Alyson Schultz	Somerville, MA	01/04/2010
Ian Thal	Somerville, MA	01/04/2010
Suzanne Bremer	Somerville, MA	01/04/2010
Laurie Goldman	Somerville, MA	01/04/2010

Nair Rocha	Allston, MA	01/04/2010
Robert Wolfreys	Somerville, MA	01/04/2010
David Grogan	Somerville, MA	01/04/2010
Gladys Maged	Somerville, MA	01/04/2010
Richard Silva	Somerville, MA	01/04/2010
Kari Dyrdahl	Mounds View, MN	01/04/2010
Jennifer Dorsen	Somerville, MA	01/04/2010
ethan gilsdorf	somerville, MA	01/04/2010
bill cavellini	Somerville, MA	01/04/2010
Peter Heller	Somerville, MA	01/04/2010
Charles Olson	Somerville, MA	01/04/2010
Christine Kim	Somerville, MA	01/04/2010
Will Scarbrough	Somerville, MA	01/05/2010
Christopher Timmel	Somerville, MA	01/05/2010
Christopher Davis	Somerville, MA	01/05/2010
Sarah Rund	Somerville, MA	01/05/2010
Evelyn Rosenthal	Somerville, MA	01/05/2010
Regina Bertholdo	Somerville, MA	01/05/2010
Jack Melcher	Somerville, MA	01/05/2010
Sharon Small	Somerville, MA	01/05/2010
Carrie Normand	Somerville, MA	01/05/2010
Lisa Chiulli Lay	Somerville, MA	01/05/2010
charles sinkler	somerville, MA	01/06/2010
Patricia Wellenkamp	Somerville, MA	01/06/2010
al amir	Somerville, MA	01/06/2010
Courtney Koslow	Somerville, MA	01/06/2010
Rory Keohane	Somerville,, MA	01/06/2010
Kenneth Kelly	Somerville, MA	01/06/2010
Renée Scott	Somerville, MA	01/06/2010
Renan Leahy	Somerville, MA	01/06/2010
chris beal	louth, TX	01/06/2010
Daniel LeBlanc	Somerville, MA	01/06/2010
Shannon LeBlanc	Somerville, MA	01/06/2010
Angel (Tito) Meza	Chelsea, MA	01/06/2010
Mary Jo Connelly	Somerville, MA	01/06/2010
Leanne Darrigo	Somerville, MA	01/06/2010
Feargal O'Toole	Somerville, MA	01/06/2010
Stephanie Toews-Moeling	Somerville, MA	01/06/2010
Ariel Harms	Somerville, MA	01/06/2010

Francis Brown	Medford, MA	01/06/2010
ben tobin	somerville, MA	01/06/2010
Kate Latimer	Somerville, MA	01/06/2010
Wendy Mason	Somerville, MA	01/06/2010
Kate Byrne	Somerville, MA	01/06/2010
Sarah Juarez	Long Beach, CA	01/06/2010
Catherine Brady	Cambridge, MA	01/07/2010
Rachel Heller	Somerville, MA	01/07/2010
Lisa Williams	Somerville, MA	01/07/2010
Alex Feldman	Somerville, MA	01/07/2010
Jeanne Eisenhaure	Somerville, MA	01/07/2010
suzanne lubeck	somerville, MA	01/07/2010
Helen Corrigan	Somerville, MA	01/07/2010
Rachel Bedick	Cambridge, MA	01/07/2010
janine fay	somerville, MA	01/07/2010
Gary Erb	Somerville, MA	01/07/2010
Ryan Vaslos	Warren, NJ	01/07/2010
Caroline Litwack	Somerville, MA	01/07/2010
Alan Hamilton	Somerville, MA	01/07/2010
John lawson	chelsea, MA	01/07/2010
Scott Erb	Somerville, MA	01/07/2010
Laurinda Bedingfield	Somerville, MA	01/07/2010
Jon O'Toole	Somerville, MA	01/07/2010
Ed Marakovitz	Somerville, MA	01/07/2010
Julia Tawyea'	Lake Ariel, PA	01/07/2010
John Murray	Somerville, MA	01/07/2010
Susanne White	Somerville, MA	01/07/2010
Claire Kozower	Somerville, MA	01/07/2010
Justin Moeling	Somerville, MA	01/07/2010
Andy Pyman	somerville, MA	01/07/2010
Bruce Combs	Williamsburg, VA	01/07/2010



Community
Corridor Planning

Petition

Somerville Community-generated Principles Should Be Reflected in the Green Line Draft Environmental Impact Report (DEIR) by the State

TO: Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
EEA #13886

Attn: Holly Johnson,
MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181

143 Signatures

RECEIVED
JAN 8 2010
MEPA

Regarding EEA #13886

Dear Secretary Ian Bowles:

O-007-001

The community members engaged with CCP would like to see all decisions related to the planning of the Green Line and the land use in the ½ mile areas around the 7 proposed stations to reflect this list of Corridor Core Principles, with specific attention to those principles relevant to the scope of MA DOT. Please see next page for list of Core Principles and corresponding suggested changes to DEIR. The highlighted principles are those we think are directly related to recommendations presented in the DEIR.

The Community Corridor Planning project, a grassroots effort to engage community members in the land use planning along the Green Line extension, has brought together hundreds of people to frame a list of core principles to guide their recommendations for land use along the extension in upcoming months. While this list of core principles was not generated specifically for MA DOT, it does demonstrate the broad values and priorities of the community which residents would like to see reflected in all planning processes regarding the Green Line Corridor. ***We ask that these principles be taken into consideration as the Mass. Department of Transportation finalizes its Environmental Impact Report.***

O-007-001

MassDOT has reviewed and considered the “Core Community Principles” for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

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Neighborhood Development Along the GreenLine Corridor

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O-007-002

The state needs to plan all transportation projects on the basis of guiding principles for Transit Oriented Development (TOD), smart growth and quality of life impacts. For example, TOD and land use are the planning and organizing focus of the South Coast Rail project, but have been ignored in the Green Line extension planning despite the requirement by the Secretary to address these concerns in the EENF.

O-007-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Signed:

Name (Printed)	Signature	Address	optional email	optional phone
ARIEL HARRIS	[illegible]	17 LAVELL ST SOMERVILLE		
Nathaniel Brooks	[illegible]	"		
WILLIAM NOLL	[illegible]	36 JOSEPHINE	wnoll@comcast.net	
Andrea Shapiro	[illegible]	SOMERVILLE 50m 11 Belmont Place	andreajshapiro@gmail.com	
Ram Kelath	[illegible]	50 Oxford St	ramkelath@aol.com	
Marisa Kelath	[illegible]	50 Oxford St.	X	
Liza Kitchell	[illegible]	50 Oxford St		
JANE FAIR BESTER	[illegible]	50A SOMERVILLE 02143 LOWELL ST.	X	
Bonny Carroll		40 Glen St Somerville 02145	bonny carroll2@rcn.com	
[illegible] Tenzin Choephel		26 Highland Ave. 02143	choephel05@hotmail.com	
Danny Huang	[illegible]	100 Thurston St	dannyhuang@gmail.com	
Fred Berman	[illegible]	25 Cherry St Somerville 02144	fredjori@rcn.com	
[illegible] Siegel	[illegible]	56 Vinal Ave Somerville 02143		
Isaac Davenport	[illegible]	V		
Sanjeev Sahargiri				
Michael Roon	[illegible]	[illegible] Somerville MA		
Evelyn Persoff	[illegible]	56 Newton St. MA		
Joe Beckmann	[illegible]	22 Stone Ave		
[illegible]		15 [illegible] Ave Somerville MA		
Josh Wairi	[illegible]	88 Wheatland St Somerville		
Wig Zamore				
Heather Van Aelst	[illegible]	1 Fitchburg St C504 02143		
DAVID DAHLBACKA		25 Hancock St Somm		
[illegible]				

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For more suggestions about the DEIR, please see the STEP website www.somervillestep.org.

Signed: Name (Printed)	Signature	Address	optional email	optional phone
Warren Sadow		50 Lynnway Lynn, MA	Warrensadow@hotmail.com	(781) 593-1934
			Warren.sadow@somerville.ma.gov	
Kristina Grossi		253 Washington St Somerville MA	dvtgrossi@	617.440.1688
			City 3 Corporation	

Signed:

Name (Printed)	Signature	Address	optional email	optional phone
Taylor Daynes	[illegible]	36 Ames St.		
Chris Smith	[illegible]	36 Ames St		
Tex Pun	Tex	379 Somerville St		
Jasmine Stoner	Jasmine Stoner	92 Highland Ave		
Clarence Exilles		Malden, MA		
[illegible]	Paul Dobler	47 Magoun St, Camb, MA		614-494-4163
[illegible]		57B, Summerset		
Brandon Nover		150 Pearl St, Somerville MA		
Marcus [illegible]		[illegible] MA		
Mark Pady	[illegible]	Stone Ave		

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Signed: Name (Printed)	Signature	Address Somerville	optional email	optional phone
Julia S Post	Julia S Post	20 Henry Ave	jpost@ci.somerville.ma.us	
Anne Herzberg		Belmont St. Somerville	aherzberg@ci.somerville.ma.us	
Tatiana Fajardo		Cross st. Somerville,	tatiana2kk@yahoo.com	
Mina Bass		81 Highland Ave, Somerville MA 02143	mbass@ci.somerville.ma.us	
Kelly Valverde		195 Pearl St Somerville, MA 02145		
Magda Dedieu		41 Avon St. #2 Somerville, MA 02143		
Sarah Lehman CCC		1 Pearl Ave #2 Somerville MA		
Kara Carpenter		10 Warwick St. Apt. 1		02143 02145
Jaime Mateus		184 Prescott St		
MARILYN MORRISSEY		315 Mcnorth Hwy		
Joseph L Burke		EHS		
Mary E. Ripley		SHS		
Emil Jones		SHS		
Francesca Rosa Monte		153 Atwater Ave Somerville MA 02144		
Michael Butler	Michael Butler	17 Stone Ave Somerville	mbutler@gmail.com	
Abelia & Tyala		4A Meacham St		
Nydia Cordo		SHS		
Theresa E. Emens		SHS		
		84 College ave somerville Ma		
JOHN Rudolph		24 College Ave Somerville Ma 02144		
David Jackson		45 MARSHALL St. Somerville, MA 02145		
Rachel		17 PITMAN ST Somerville 02143		
Jacey Lawrence		17 Tufts St Somerville Ma 02145		
Susan Louden		419 Norfolk St		617 628 5526

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For more suggestions about the DEIR, please see the STEP website www.somervillestep.org.

Signed:

Name (Printed)	Signature	Address	optional email	optional phone
Nadia Lubin		125 A Alewife Brook parkway Apt 23 02144 (857-249-2986)		
Marie Josené Abraham		503 Warren St Somerville, MA (857) 251-4120		
ABDUL RAYES		268R Powder House Blvd 16C Somerville MA (617-816-4319) 02144		
MARIA SILVA		268R Powderhouse #28C = 617 5014681		
Marie Francine Pierre		268R Powder House #38 617 686 7528		
Rose Michelle Gregroire		268 Powderhouse Blvd #C27R 857-312-5244		
CLIFFORD F PITTS		34B North Apt 14 617-776-7543		
Pauline Alphonse		617 764 2750		
34A North St H33A				
Ronald Adolphe		34A North St #33A 617-764-2750		
Jean M. Richard		24 C North St apt 18 617-718-1871		
Wendy Cortez		24C North St #20 617-501-4224		
Ana da Cruz		24C North St #26 857-236-9278		
MARLENE TEIXEIRA		34R North St #12A 617 776-3639		
* [illegible]		139 Alewife Brook #18 617-5013660		
* TAM NGUYEN		139A Alewife Brook Pkwy #11 617-628-8069		
Maria Melendez		139A Alewife Brook Pkwy #21		
ISABEL ALVAREZ		278 Powderhouse Blvd #211 A Som. 617 661 3703		
John Beaulieu		278 Powderhouse Blvd Apt 21A 617-412 0244		
[illegible] Martinez		278 Powderhouse Blvd Apt 32A 617-620-0368		

Signed:

Name (Printed)	Signature	Address	optional email	optional phone
Paul Carr	Paul Carr	1366 Broadway #2N		617-718-2058
Jade Best	Jade Best	1366 Broadway #2-O		617 955-5928
Michael Bowden	Michael Bowden	1366 Broadway 2-J		617-776-4667
Cody Parker	Cody Parker	1366 Broadway 2B		6177180845
Muskaan Jilla		1366 Broadway St 3A		617-996-9188
Karl Wilkins		1366 Broadway 3J		None
Jonak R Pathak		1366 Broadway 3A		617-412-858
Mark A Pezz		1366 Broadway apt 4C. Sgm.		617-718-9276
Murrat Jilla		1366 Broadway 5B		617-996-2599
Sabina Jilla		1366 Broadway 5B		617-996-2599
Ilyas Gaswala		1366 Broadway 5B		617-996-2599
Dorothy Kehoe		1366 Broadway 5A		See Mass
Richard Sewers		1366 Broadway apt #2M		617-666-
Rosa Jackson		1370 Broadway 2E		978-553-1154845
Rafael Jackson		1370 Broadway 2E		978-553-9154
Marie Joseph		1376 Broadway 8H		617 904 [illegible]
Sadie Hill		1366 Broadway St 3A		617-859-8959
Kareem Eyad		1366 Broadway 3M		617-221-6624
Nicholas Bekatsou		1370 Broadway 9N		617-401-8986

Teen Empowerment

Signed:

Name (Printed)	Signature	Address	optional email	optional phone
Remy Chacon	[illegible]	35 A [illegible] Rd #33		781 346 4475
[illegible] Jimenez	[illegible]	6 Remy Ct		617-943-7319
Felicia Murphy	[illegible]	85 Cedar St		617-516-7793
[illegible]	[illegible]	1370 Broadway Apt 3C		857-382-5216
Brandell Bayelo	[illegible]	354 Broadway apt 2		
Joenelle Lawrence	[illegible]	Joenelle@yahoo.com		857-222-3815
Gregory Riego	Gregory Riego	10 Lee St.	Riego22@gmail.com	617-776-[illegible]
Marlon Ramdehal (MARLON RAMDEHAL)		236A PEARL ST.		
Amanda Holm	Amanda Holm	259 Summer St.	amanda@teenempowerment.org	
John mendoza	John Mendoza	367 McGrath Hwy	JSmendoza924@yahoo.com	
Emily Ottaviano	[illegible]	101 Lowell	Emily0x4@gmi.com	
Daniel McLaughlin	[illegible]	34 Spencer ave		
[illegible] Lyons	[illegible] Lyons	1374 Broadway Apt 1C	[illegible]@yahoo.com	
[illegible]	[illegible]	48 Meacham Rd Somerville		

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Signed: Name (Printed)	Signature	Address	optional email	optional phone
[illegible]	[illegible]	22 [illegible]	[illegible]	[illegible]
Rebecca Mandel	[illegible]	[illegible]	[illegible]	
Mary Purdy	Mary Purdy	[illegible]	[illegible]	
Tai Dinnan	Tai D.	#2 [illegible] 02144 33 Hawthorne St. Somerville		
KYANN ANDERSON	[illegible]	72 ALPINE ST. 02144 SOMERVILLE, MA	KYANN.ANDERSON@GMAIL.COM	
Olivia Hewal	[illegible]	44 Hull Ave. #2 Somerville, MA 02144		
Ivo Popa	[illegible]	35 Central Rd 02143	popiva@[illegible]schoo it	
Maura Schorr Beaufait	[illegible]	55 Gorham St., Apt #3 Somerville, MA 02144	maura.beaufait@gmail.com	

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Signed:

Name (Printed)	Signature	Address	optional email	optional phone
Peter McPhee	[illegible]	26 Clarendon Ave #3		
Keith Craig	[illegible]	5 Ericson Street.		
Jon Van Kuiken	[illegible]	220 School St.		
[illegible]	[illegible]	16 [illegible] Rd, Sa		

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For more suggestions about the DEIR, please see the STEP website www.somervillestep.org.

LISA'S Friend

Signed:

Name (Printed)	Signature	Address	optional email	optional phone
Caroline St Hilaire	St Hilaire	Caroline 153 Alewife Brk Pkwy #34B Somerville MA 02144	Tel (617) 623-2745	

CONSERVATION LAW FOUNDATION

November 18, 2009

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MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst, EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Comments at November 18, 2009 Green Line Extension DEIR/EA Public Hearing

Dear Secretary Bowles:

I appreciate the opportunity to testify at the Green Line Extension DEIR/EA public hearing tonight and hereby would like to also provide my comments in writing. In the interest of time, I intend to keep my comments brief.

O-008-001

The release of the DEIR/EA marks an important milestone for the Green Line Extension project. We would like to thank MassDOT and the Executive Office of Energy and Environmental Affairs for all their work on getting the Green Line Extension project environmental review process to this crucial stage. The Green Line Extension project will provide significant environmental benefits and mobility improvements for residents of Somerville, Medford and Cambridge. If done right, this project also has great potential to further environmental justice, economic development and smart growth.

O-008-002

One of the outstanding issues of the Green Line Extension project concerns the location of the maintenance facility. The last paragraph of page 3-10 of the DEIR/EA states that the Commonwealth intends to perform a complete analysis of the maintenance facility alternatives and that the results will be made available to the public for input and discussion. The location of the maintenance facility is of great interest to many supporters of this project. For meaningful public participation to take place, it is essential that the analysis of the alternatives is not only released to the public, but with enough time to allow for public comment.

Thank you again for the opportunity to comment at this time. The Conservation Law Foundation will submit further and more detailed comments in writing before the expiration of the extended comment period.

Sincerely,

Rafael Mares
Staff Attorney

62 Summer Street, Boston, Massachusetts 02110-1016 • Phone: 617-350-0990 • Fax: 617-350-4030 • www.clf.org

MAINE: 14 Maine Street, Brunswick, Maine 04011-2026 • 207-729-7733 • Fax: 207-729-7373
NEW HAMPSHIRE: 27 North Main Street, Concord, New Hampshire 03301-4930 • 603-225-3060 • Fax: 603-225-3059
RHODE ISLAND: 55 Dorrance Street, Providence, Rhode Island 02903-2221 • 401-351-1102 • Fax: 401-351-1130
VERMONT: 15 East State Street, Suite 4, Montpelier, Vermont 05602-3010 • 802-223-5992 • Fax: 802-223-0060

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O-008-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-008-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

CONSERVATION LAW FOUNDATION

Protecting New England's Environment

January 8, 2010

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Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn. Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles:

O-009-001

The Conservation Law Foundation ("CLF") appreciates the opportunity to comment on the Draft Environmental Impact Report/Environmental Assessment ("DEIR/EA") for the Green Line Extension Project ("Project"). As you know, CLF has been a long-time champion of the Project. It will provide significant and urgently needed transportation, environmental justice, land use, climate and air quality benefits to the Greater Boston area. CLF continues to strongly support its timely completion. We appreciate, as well, your and the Massachusetts Department of Transportation's ("MassDOT") efforts to move this project forward consistent with the Commonwealth's transit commitments.

O-009-002

CLF originally supported MassDOT's request for a single environmental impact report ("SEIR") to the extent that mechanism would accelerate the environmental review process. However, CLF's support was contingent upon MassDOT's preparation of a comprehensive SEIR sufficient to demonstrate that the selected project will deliver the required air quality benefits and, overall, be most beneficial to the communities it will serve. Unfortunately, the DEIR/EA, as described in detail below, is not responsive to a number of significant requirements set forth in the Secretary's Expanded Environmental Notification Form Certificate ("EENF Certificate") and the proposed project does not comply with the Massachusetts State Implementation Plan ("SIP").

Accordingly, we respectfully request that MassDOT be required to submit a final environmental impact report ("FEIR") addressing and remedying the outstanding issues we raise below. We believe that the FEIR does not need to be a stand-alone document but, as is permitted by 301 CMR 11.07(4), can be limited in scope to the aspects of the project or issues that require further review or analysis, such as those raised in these and other comments. Under the circumstances, a continued environmental review process would provide an opportunity to advance this project in a way that will help guarantee its ultimate success.

62 Summer Street, Boston, Massachusetts 02110-1016 • Phone: 617-350-0990 • Fax: 617-350-4030 • www.clf.org

MAINE: 47 Portland Street, Ste. 4, Portland, Maine 04101-9872 • 207-210-6439 • Fax: 207-221-1240
NEW HAMPSHIRE: 27 North Main Street, Concord, New Hampshire 03301-4930 • 603-225-3060 • Fax: 603-225-3059
RHODE ISLAND: 55 Dorrance Street, Providence, Rhode Island 02903-2221 • 401-351-1102 • Fax: 401-351-1130
VERMONT: 15 East State Street, Suite 4, Montpelier, Vermont 05602-3010 • 802-223-5992 • Fax: 802-223-0060

O-009-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-009-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I. MassDOT Has Not Satisfied EENF Certificate Requirements

Section 62A of the Massachusetts Environmental Policy Act ("MEPA"), M.G.L., c. 30, §§ 61, 62-62H, states that "[t]he secretary shall determine the form, content, level of detail and alternatives required for the [environmental impact] report." The Supreme Judicial Court, in *Allen v. Boston Redevelopment Authority*, 450 Mass. 242 (2007), held that, where the Secretary defines the appropriate scope of an environmental impact report and the proponent fails to meet these requirements, there is no rational basis for certification of compliance with MEPA and its regulations. Similarly, MassDOT has failed to meet the following requirements of the EENF Certificate:

A. *Failure to Satisfy EENF Certificate Requirements Concerning Air Quality Analysis*

To place our comments in context, it is useful to recall that, since 2006, there have been three relevant individual rounds of air quality analyses involving the Project. As set forth in greater detail below, each of these analyses employed a different set of underlying assumptions and data inputs, making valid comparisons between them impossible.

In December of 2006, for purposes of the proposed SIP revisions that were ultimately codified in federal law in 2008, the revised package (1,000 additional commuter rail parking spaces in greater Boston, Fairmount Line improvements, and Green Line extension to Medford Hillside with a spur to Union Square) as well as the original package of transit commitments (Green Line extension to Ball Square, Arborway restoration, and Red-Blue connector construction) were analyzed to determine the impact on relevant air pollutant emissions. See Central Transportation Planning Staff ("CTPS"), "Description of Modeling Assumptions and Analysis Methodology for the State Implementation Plan Transit Commitment Projects Current and Proposed Substitutions," December 28, 2006, revised March 15, 2007 ("2006 SIP Analysis").

In 2009, for purposes of the DEIR/EA, MassDOT modeled air quality impacts associated with each of the alternatives considered for the Green Line Extension ("2009 DEIR/EA Air Quality Analysis"). See DEIR/EA, Volume 1, at 5-79 to 5-98. The 2009 DEIR/EA Air Quality Analysis was designed to comply with Federal Transit Authority ("FTA") funding requirements.

The third analysis, also completed in 2009 for purposes of the DEIR/EA, was modeled by MassDOT in an attempt to demonstrate SIP consistency ("2009 DEIR/EA SIP Analysis"). See DEIR/EA, Volume 1, at 5-102 to 5-103. The specific goal of the 2009 DEIR/EA SIP Analysis was to demonstrate that the package of transit improvements in the current SIP (as interpreted by MassDOT to include extension of the Green Line only to College Avenue with a spur to Union Square) will accomplish the minimum of 110 percent of the emissions reductions that would have been achieved if the package of projects in the 1991 SIP had been built. To that end, MassDOT modeled the expected air quality benefits of a single project—the Green Line Extension to College Avenue with a spur to Union Square—and then compared the results to the 2006 SIP Analysis modeling results for the *entire* original package of transit commitments (Green Line extension to Ball Square, Arborway restoration, and Red-Blue connector

construction). MassDOT also elected not to remodel the 2006 original package using the new assumptions and inputs included in the 2009 DEIR/EA SIP Analysis, and, as a result, no valid comparison between the emissions reductions associated with the original package of transit commitments and those associated with the total revised package (including the Green line Extension to College Avenue) was presented.

O-009-003 The EENF Certificate requires that the DEIR/EA include an evaluation of regional air quality impacts of ozone precursor emissions (mesoscale analysis) and a calculation of carbon monoxide and particulate matter concentrations at congested intersections near the project corridor (microscale analysis) to describe the air quality benefits associated with the Project. See EENF Certificate at 10. The meso- and microscale analyses included in the 2009 DEIR/EA Air Quality Analysis were designed to comply with this mandate and also with Federal Transit Authority (FTA) funding requirements. According to MassDOT, an unavoidable consequence of this FTA-compliant modeling design, see DEIR/EA, Volume 1, at 5-101, 5-102, is that it does not produce results that can be directly compared to the air quality analysis performed as part of the SIP amendment process in 2006.

O-009-004 The EENF Certificate also requires a description of the Project's "consistency with the [SIP] and MassDEP's Transit Regulations." See EENF Certificate at 10. The DEIR/EA, however, is in fact so opaque with respect to the methodology employed by MassDOT for purposes of the 2009 DEIR/EA SIP Analysis that no member of the public could reasonably be expected to understand and/or discern whether the models represent a valid comparison. For example, it is unclear whether the same transportation model, emissions model, start year, end year, and/or assumptions about future land uses, travel model, roadways and transit networks were applied in the 2006 SIP Analysis and the 2009 DEIR/EA SIP Analysis. This represents, among other issues, a significant impediment to meaningful public participation.

O-009-005 To gain clarity on these points, CLF met with MassDOT and CTPS representatives on January 4, 2010. CLF has learned that the assumptions and data inputs to the 2006 SIP Analysis differed strikingly from those input to the 2009 DEIR/EA SIP Analysis. The analyses applied different inputs to the emissions model (e.g., 0.177 and 0.153 g/mile of nitrogen oxides at 35 mph respectively) and distinct start years (2000 and 2006 respectively) and end years (2025 and 2030 respectively). The analyses also used different assumptions about land uses (e.g., the 2009 SIP Analysis relies heavily on the new MetroFuture progressive regional plan, which was not available in 2006), traffic modeling (986 and 2,727 traffic analysis zones respectively), and roadway and transit networks (e.g., the Urban Ring was only included in the no-build alternative for the 2006 SIP Analysis). At the same time, MassDOT and CTPS also informed CLF that the original package of projects was not evaluated in the 2009 DEIR/EA SIP Analysis thereby making a valid comparison impossible.

O-009-006 Data presented in Table 5.6-11 further highlight the substantial flaws in MassDOT's 2009 DEIR/EA SIP Analysis. The table purports to demonstrate that *the Green Line extension to College Avenue with a spur to Union Square, standing alone, that is without factoring in the air quality benefits of any of the additional transit commitments, achieves greater air quality benefits than the entire package of original transit commitments*. Specifically, MassDOT asserts,

O-009-003

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

O-009-004

Please see response to Comment O-009-003.

O-009-005 through O-009-007

The air quality analysis included in the DEIR/EA demonstrates that the Green Line Extension Project meets the Transportation Conformity planning-level requirements and that the emission reductions for the 2009 SIP package, which includes the Green Line Extension Project, exceed the emission reductions for the 2008 Federal Register SIP Approved Projects by more than 10%. The emission reductions were calculated following the same modeling protocol and procedures required for Transportation Conformity and SIP air quality analyses. Transportation Conformity and SIP air quality analyses utilize traffic data from the statewide traffic model and the EPA's emission factor model MOBILE6.2. The statewide traffic model is maintained by the CTPS, the technical staff of the Boston Region MPO, which is responsible for SIP air quality submissions.The statewide traffic model is the basis for determining existing and future traffic data for Clean Air Act Amendments (CAAA) and NEPA submissions.

The EPA requires that statewide traffic models used for SIP submissions be based upon the most recent approved planning level data. As a

O-009-006 without explanation, that the Green Line extension to College Avenue will achieve larger emissions reductions of 151 kg/day for carbon monoxide ("CO"), 0.5 kg/day for nitrogen oxides ("NOx"), and 2 kg/day for volatile organic compounds ("VOC").

O-009-007 The 2009 DEIR/EA SIP analysis also concludes, albeit indirectly, that the Green Line extension to College Avenue with a spur to Union Square as modeled in 2009 would yield considerably greater emissions reductions than the Green Line extension to Medford Hillside with a spur to Union Square as modeled in 2006, although the two analyses assumed the same terminus—College Avenue. See DEIR/EA, Volume 1, at 5-102 and 2006 SIP Analysis at 6.

The egregiousness of these flaws is made even more apparent when one considers that the 2006 SIP Analysis showed that the Red-Blue connection was the greatest contributor to air quality benefits in the original package. See Attachment 1, 2006 SIP Analysis at 10 (Table 1). That project was responsible for a reduction of 400% more NOx and 180% more VOC than the extension of the Green Line to Ball Square proposed at the time and was expected to result in close to the same reduction of CO (94%). Additionally, the emissions reductions from the Arborway restoration were expected to be greater than those associated with the Fairmount improvements.[1] Plainly, the comparison of air quality benefits in Table 5.6-11 of the DEIR/EA is inaccurate. This result is particularly questionable because the proposed alternative for the extension of the Green Line only adds two stations—College Avenue and Union Square.[2]

O-009-008 As a result of these serious modeling errors, the 2009 DEIR/EA SIP Analysis cannot demonstrate SIP consistency. Because, by MassDOT's own admission, the 2009 DEIR/EA Air Quality Analysis cannot be compared to the 2006 SIP Analysis, it also does not provide an alternative set of data against which to assess SIP consistency. To properly respond to the EENF Certificate requirements, an accurate and valid air quality comparison analysis—applying consistent modeling to both the original package of projects and to the revised package, including the Green Line Extension to College Avenue—must be completed. MassDOT's assumptions with respect to this air quality comparison analysis must be made clear to facilitate public participation and ensure a transparent process.

B. Failure to Satisfy EENF Certificate Requirements Concerning Stormwater Analysis

The EENF Certificate requires a careful analysis of impacts to land and stormwater. See EENF Certificate at 9. While the DEIR/EA addresses some of the mandates of the EENF Certificate with regard to stormwater, it does not provide an analysis sufficient to satisfy the EENF Certificate requirement.

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[1] The emissions reductions for the Arborway restoration and the Fairmount improvements respectively were estimated to be 85 kg/day versus 47kg/day of CO, 7 kg/day versus 5kg/day of VOC, and 1 kg/day of NOx for both.

[2] It is worthwhile noting in this context that the results of the 2006 SIP Analysis also raise some questions. That analysis predicts that the Green Line extension to Union Square and Medford Hillside will have disproportionately greater emissions reductions as compared to the original expansion to Ball Square (227% for CO, 800% for NOx, and 340% for VOC) than one would expect, considering that, as modeled, the new expansion would add only two additional stations (Union Square and College Avenue). See Attachment 1.

result, statewide traffic models are periodically updated to include newly identified background projects, land use, and model enhancements. Statewide traffic models typically include the roadway network that exists at the time it is run and regionally significant projects (background projects) that are reasonably expected to be constructed by the design year (i.e., twenty years into the future). Similarly, the MPOs establish and periodically update the land use for existing and future years. The statewide traffic model that CTPS uses for forecasting travel demand is based on procedures and data that have evolved over many years. It uses the most up to date information, transportation networks, and input data available to CTPS at the time of analysis. The statewide traffic model simulates existing travel modes for transit, auto, and walk/bike and forecasts future year travel on the entire transportation system, spanning, in this instance, the majority of eastern Massachusetts. It uses population, employment, number of households, auto ownership, highway and transit levels of service, as well as downtown parking costs, auto operating costs and transit fares as important inputs in applying the model to the real world condition.

As required by EPA, these inputs are constantly updated so that the model set simulates current travel patterns with as much accuracy as possible. The greatest challenge to the air quality modeling is ensuring consistent results when the statewide traffic and the mobile source emission factor models are periodically updated. For example, the statewide traffic model of 2006 was used to establish the 2008 Federal Register SIP Approved Projects + 10% emissions criteria. This air quality modeling used the best transportation network and input data available at that time. The air quality modeling presented in the DEIR/EA uses an improved statewide traffic model with an updated roadway network, more current land use data, and a newer version of EPA's mobile source emissions factor model. All of these measures result in improved accuracy of the present day and future air quality estimates. This real

O-009-009

For example, the EENF Certificate requires the DEIR/EA to "investigate all feasible measures of reducing impervious surfaces." See EENF Certificate at 9. The DEIR/EA, however, only states that "[t]he existing designs strive to minimize impervious surfaces through the use of existing streets and rail corridor and by reusing existing, developed sites for the stations wherever possible." See DEIR/EA, Volume 1, at 5-134. The DEIR/EA does not consider other beneficial measures to minimize impervious surfaces, such as, vegetated areas, green roofs, and other low-impact development stormwater techniques. By its own admission, MassDOT fails to consider all feasible measures to reduce impervious surfaces stating that "[a]dditional efforts will be taken during preliminary engineering and final design to reduce the net increase in impervious surfaces." See DEIR/EA, Volume 1, at 5-134. Stormwater impacts, however, need to be considered *prior* to selecting a proposed alternative. It is for that reason that the EENF Certificate calls for MassDOT to develop an operations and management plan to mitigate stormwater impacts. See EENF Certificate at 9. The DEIR/EA impermissibly postpones development of such a plan to the final design of the stormwater management system. See DEIR/EA, Volume 1, at 5-138.

O-009-010

The EENF Certificate also requires that MassDOT "demonstrate that source controls, pollution prevention measures, erosion and sediment controls, and the drainage system will comply with" the Massachusetts Stormwater Management Standards for construction and post-construction, and with state water quality standards. See EENF Certificate at 9. The Massachusetts Stormwater Management Standards require specific measures to ensure protection of the Commonwealth's water resources and communities including, but not limited to, the following: no new stormwater outfalls may discharge untreated stormwater (Standard 1), loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, and stormwater best management practices (Standard 3), stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS) (Standard 4). See Massachusetts Stormwater Handbook, Volume 1, Chapter 1, February 2008.[3] The DEIR/EA does not address how the Project will comply with these standards.

O-009-011

Stormwater from the Project would be directed into municipal sewer systems that discharge into the Charles and Mystic Rivers. The Charles River, infamous for its "dirty water," has recently experienced dramatically lower levels of pollutants in part due to a focus on eliminating stormwater runoff. The Mystic River watershed has been long neglected and is surrounded by environmental justice communities that would benefit significantly from access to a clean river. As such, it is necessary for MassDOT to take into account carefully the stormwater impacts of the Project to ensure compliance with all applicable state and federal clean water laws prior to completing the environmental review process. MassDOT therefore should be required to complete and include within the FEIR a detailed stormwater impact analysis that complies with the requirements of the EENF Certificate.

[3] Available at http://www.mass.gov/dep/water/laws/v1c1.doc (last accessed Jan. 8, 2010).

time approach to air quality modeling results in emission values that are considered appropriate for the SIP process. In fact, this air quality modeling approach is required by EPA for evaluating Transportation Plans, Transportation Improvement Programs, and projects for SIPs and NEPA documents.

Please refer to Chapter 3 – Air Quality for a more detailed response concerning the challenges associated with the evolution of modeling programs and input data over time, and how the air quality modeling results presented in the DEIR/EA sufficiently demonstrate consistency with the SIP.

O-009-008

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

O-009-009

Proposed stormwater management methods to prevent any increased risk of flooding downstream and to maintain the existing quality of the rivers that receive discharge from the municipal stormwater systems are outlined in Section 6.5.4.6 of the DEIR/EA. The project would be required to comply with federal and state stormwater discharge permit conditions during both the construction and operational phases. Additional design will be advanced during preliminary engineering.

C. Lack of Detailed Analysis of Funding Sources to Support Choice of Proposed Alternative

The EENF Certificate specifically requires a detailed description of funding sources for the Project. See EENF Certificate at 5. The DEIR/EA nowhere provides such a description.

The DEIR/EA states that "EOT expects Project funding will come both from the FTA and from state bonds." See DEIR/EA, Volume 1, at 1-2. Later it provides: "[h]owever, because of the constraints placed on EOT by Federal [sic] funding requirements and the economic crisis facing the Commonwealth, at this time EOT is not able to identify sufficient funding to support construction of the Medford Hillside to Mystic Valley Parkway/Route 16 segment within the 2014 timeframe mandated by the State Implementation Plan." See DEIR/EA, Volume 1, at 1-6 and 3-40. It also states that ". . . EOT plans to seek Federal funding for the project. . . ." see DEIR/EA, Volume 1, at 5-102, and "EOT is working with the FTA to apply for New Starts funds for the project." See DEIR/EA, Volume 3, at 33. Further, responding to a comment, MassDOT represents that "[t]he Project will be funded using a combination of Transportation dollars appropriated by the State and by funds that EOT is seeking through the FTA New Starts program." See DEIR/EA, Volume 3, at 167.

O-009-012

MassDOT's vague discussion of potential project funding is insufficient to satisfy the EENF Certificate requirement. For example, the FTA New Starts program requires a fifty percent state match. The DEIR/EA neither describes the source nor the amounts of the corresponding state funding beyond its general reference to state bonds. It also does not explain how the project will be funded should federal funding, which is not guaranteed, fall through. The EENF Certificate's requirement to provide a detailed description of funding sources is particularly critical since MassDOT's selection of the proposed project, by its own admission, rests on considerations of available sources of project funding. Despite the substantially more significant environmental and environmental justice benefits associated with the so-called "preferred alternative" (Alternative 2, extending the Green Line to Route 16), MassDOT did not choose that alternative and instead selected Alternative 1 (to College Avenue) as its proposed project, solely because of its inability to identify sufficient funding sources to complete Alternative 2 by the SIP deadline. MassDOT concludes without explanation that Alternative 2 could not be financed on time.

MassDOT should therefore be required to present a projected budget for the Green Line Extension with a detailed description of all available funding sources which includes sufficient information to determine whether funding to support construction of the Medford Hillside to Route 16 segment within the 2014 timeframe is available. Such a budget should identify expenditures already incurred, cost estimates for each alternative, plus existing and potential funding sources. The description of the funding sources should be detailed. It should identify their origin (federal, state, local or private), nature (discretionary or non-discretionary), financing mechanism (revenue bonds, grants, grant anticipation notes, pay-as-you-go, state appropriations, etc.), name (e.g., New Starts, flex-funded transit), amount (whether actual or projected), restrictions, if any, and status (received, approved, pending or potential). For funding already received, the budget should include the date it was received, the amount spent, how it was spent, and how the remainder has been allocated. For funding not yet received, the budget should

O-009-010

Please see response to Comment O-009-009.

O-009-011

Please see response to Comment O-009-009.

O-009-012

A detailed project budget, including potential funding sources, will be developed during preliminary engineering. Project cost estimates are based on the current, conceptual level of design. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. In order to fund any state share of the costs of constructing the Green Line Extension project, MassDOT will need to make use of capital funds raised through Commonwealth bonding. Should the existing bond authorization for the State Implementation Plan projects (of which the Green Line Extension project is one) not be sufficient, MassDOT will need to work with the Legislature and the Executive Office of Administration & Finance to provide additional bond authorization to cover those costs of the Green Line Extension project for which the Commonwealth is responsible.

O-009-012 include the actual or expected dates of the application and receipt, the actual sum expected or the range of projected amounts. The budget should also include an estimate of any possible recovery of costs associated with this project, such as from the use or sale of the current Lechmere station property.

D. Incomplete and Segmented Analysis of Maintenance Facility Environmental Impacts

O-009-013 In its "Additional Maintenance Facility Alternatives Analysis" released on December 9, 2009 ("Additional Analysis"), MassDOT states that if it decides to substitute an alternative site to Yard 8 as the preferred maintenance facility location, a full analysis of environmental impacts (to natural resources, air quality, noise and vibration, historic resources, as well as social and economic impacts) will be conducted and documented in a notice of project change. It follows that, if MassDOT decides not to choose a different site for the maintenance facility, its choice will have been made without full consideration of the environmental impacts. This approach negates the purpose of the NEPA/MEPA processes.

O-009-014 Based on the fact that the DEIR/EA itself did not include an analysis of all the maintenance facility locations under consideration, it appears that MassDOT may have impermissibly attempted to segment its review. See, e.g., *Northwest Bypass Group v. U.S. Army Corps of Engineers*, 552 F.Supp.2d 97, 125 (D.N.H., 2008) ("Connected and cumulative actions are considered in the EA 'to assure that decisionmakers, as well as the public, are aware of the environmental impacts of the entire project, as an interconnected whole, so as to avoid irreversible commitment to an entire project on the strength of a segmented analysis of the impacts associated with something less than the entire project.'") (quoting *Sierra Club v. Marsh*, 744 F. Supp. 352, 364 (D. Me. 1990)).

O-009-015 The EENF Certificate clearly states on its first page that "[f]or this project to achieve its potential, [MassDOT] and the MBTA must design the project carefully and coordinate proactively and effectively with state and city agencies, citizens, local businesses and other stakeholders during all aspects of the project—planning, design and construction." While MassDOT has, so far, facilitated a public participation process to address the potential maintenance facility location, it has failed to respond fully to the strong and legitimate concerns of the communities directly affected. To date, no decision on the location of the maintenance facility has been made. Since the Advisory Group meeting on May 5, 2008, when MassDOT first detailed its support facility analysis and findings, the agency has faced widespread opposition to Yard 8 from residents, community groups, city representatives, and members of the state and federal legislative delegations. Through public hearings on November 18, 2009 and December 16, 2009, the Commonwealth has continued to receive thoughtful and, at times impassioned, critiques of the Yard 8 option.

As the EENF Certificate states "[t]he overarching policy goal within MEPA review for the use and reuse of land is to direct public infrastructure investments to spur revitalization of previously developed urban sites over undeveloped Greenfield sites." See EENF Certificate at 5. Further, the EENF Certificate mandates that "[t]his project should be designed to maximize benefits for local residents while preserving the integrity and character of existing

O-009-013

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-009-014

Please see response to Comment O-009-013.

O-009-015

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-009-016 neighborhoods." See EENF Certificate at 2. Opponents of Yard 8 have argued that the maintenance facility will have a severe impact on the viability of development of the Innerbelt and Brickbottom neighborhoods of Somerville. Combined, these neighborhoods constitute a 225-acre industrial zone, with 145 developable acres remaining, which could be a driver of significant economic development. The existing transportation infrastructure—including the Lowell Line, the freight right of way, the Boston Engine Terminal, McGrath highway and I-93—form a nearly impenetrable barrier around the neighborhoods. The expansion of the Green Line has the potential to help break down the barriers to this area, connect it to other parts of Somerville, Cambridge and Boston and spur economic development. The maintenance facility, depending on its location and the manner in which it is constructed, however, could create another physical barrier and remove land which could otherwise be used for economic development. Neither the DEIR/EA, nor the Additional Analysis, fully considers the relative impacts of the remaining maintenance facility location options on revitalization of the area. Failure to do so not only limits the Project's opportunity to live up to its full potential but also unnecessarily places its timely completion at risk.

O-009-017 The EENF Certificate also requires an analysis of noise and vibration for existing and proposed conditions which includes the identification of sensitive receptors, a detailed noise assessment and vibration analysis, and mitigation measures. See EENF Certificate at 13. Considering the significant community opposition to the siting of the maintenance facility at Yard 8 in large part due to its noise and vibration impacts, it is necessary that a full analysis be completed to help inform the choice of the maintenance facility location.

O-009-018 Likewise, the EENF Certificate requires the proponent to address the stormwater impacts of the project alternatives. See EENF Certificate at 9. While the DEIR/EA includes such an analysis for each of the Green Line Extension alternatives, it fails to consider the stormwater impacts of any of the maintenance facility options other than Yard 8. The Additional Analysis also does not address the stormwater impacts of the additional maintenance facility options reviewed. The largest change in impervious surface area as a result of this project is related to the maintenance facility. Yard 8 would increase the impervious area by 4.8 acres, which is over seventy percent of the total increase in impervious area for the entire proposed project. This is of particular importance because the maintenance facility is most likely also the portion of the project with the greatest potential for release of contaminants into stormwater. Stormwater from the maintenance facility, regardless of which of the options still under consideration MassDOT chooses, would be directed into a municipal sewer system that discharges into the Mystic River. As such, it is necessary for MassDOT to take into account carefully the stormwater impacts of the maintenance facility at all locations under consideration to ensure compliance with all applicable state and federal clean water laws.

O-009-019 To comply with the scope of the EENF Certificate, MassDOT should therefore be required to complete and include within the FEIR a full environmental impact analysis, including, but not limited to, noise, vibration, air emissions, and stormwater impacts, for each of the maintenance facility site alternatives under consideration. MassDOT should also detail specifically how each maintenance facility alternative will impact surrounding neighborhoods and opportunities for revitalization.

O-009-016

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-009-017

FEIR Chapter 2 presents an analysis of noise and vibration impacts for each site alternative. The storage and maintenance facility and its rail approaches will be designed to minimize noise and vibration impacts to neighboring properties and stakeholders. Noise and vibration mitigation measures are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

O-009-018

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. FEIR Section 2.3 provides a

II. Limited Extension to College Avenue by December 31, 2014 Violates SIP

The United States Environmental Protection Agency ("EPA") has designated Eastern Massachusetts a nonattainment area for ozone. A purpose of the SIP is to help Massachusetts achieve ozone attainment. Because motor vehicles are the predominant sources of ozone precursor emissions in the area, the SIP relies on strategies to reduce vehicle miles traveled ("VMT"). The extension of the Green Line, an important transportation control measure ("TCM"), is therefore an essential element of the SIP.

The Clean Air Act ("CAA") requires projects receiving federal funding within nonattainment areas to demonstrate compliance with the SIP. Specifically, 42 U.S.C. § 7506(c)(2) mandates that "[n]o Federal agency may approve, accept or fund any transportation plan, program or project unless" the project "has been found to conform to any applicable implementation plan." The Federal Highway Administration Regulations, at 23 CFR §771.133, state that "[t]he final EIS or FONSI should document compliance with requirements of all applicable environmental laws, Executive orders, and other related requirements." Massachusetts Regulations, see 310 CMR § 60.03(13)(a), require "timely implementation" of TCMs included in a SIP and transportation plan, like the Green Line Extension Project. Therefore the environmental review process must document that the Green Line Extension Project, as currently proposed in the DEIR/EA, will comply with the SIP deadline.

O-009-020

O-009-021

The SIP requires an extension of the Green Line from Lechmere Station both to Union Square and Medford Hillside by December 31, 2014. The EENF Certificate provides that "the regulations do not specify the terminus of the line *within* Medford Hillside (emphasis added)." See EENF Certificate at 8. To comply with the SIP, MassDOT must construct, by December 31, 2014, an extension of the Green Line that terminates in Medford Hillside. Medford Hillside's historical boundaries are well documented and do not include the location of the proposed terminus at the intersection of College Avenue and Boston Avenue. Historical and modern maps, as well as published references to the neighborhood, previously provided to MassDOT and included with these comments, see Attachment 2, clearly demonstrate that the proposed project does not reach the Medford Hillside.

The DEIR/EA states, without explanation and contrary to the well-documented definition of Medford Hillside, that the proposed project meets the SIP requirement because the College Avenue terminus reaches Medford Hillside. MassDOT must, pursuant to the EENF Certificate, either demonstrate that the College Avenue terminus lies within the Medford Hillside—which we believe it cannot do—or select an alternative terminus that satisfies the SIP. The MEPA and NEPA processes can only be concluded if the project complies with the SIP, which calls for an extension beyond College Avenue to Medford Hillside. A terminus at Route 16, as considered in four out of six alternatives in the DEIR/EA, would fulfill the SIP requirement to extend the Green Line to Medford Hillside.

In this context, it is useful to note that former Secretary of Transportation James A. Aloisi, Jr. in his close-out report of October 29, 2009 stresses that "[t]he Green Line expansion is a lost opportunity without a clear and unequivocal commitment to extending the line to Route

comparison summary of environmental impacts for the three maintenance facility alternatives. As a result of the evaluation, Option L is identified as the preferred maintenance facility site. Design for the maintenance facility and the entire project alignment will be refined during the Project's preliminary engineering stage.

O-009-019

Please see response to Comment O-009-018.

O-009-020

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency. As described in Section 1.1 of the DEIR/EA, the Proposed Project is anticipated to be completed by December 31, 2014 in compliance with the SIP. MassDOT is continuing to strive to achieve this goal.

O-009-021

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the

16." See Secretary Aloisi's Letter to Governor Deval Patrick, dated October 29, 2009, at 7. Such a commitment currently does not exist. Compared with terminating the line at College Avenue, the Route 16 terminus would produce an estimated additional reduction in VMT over the Baseline Alternative of more than ten percent. It also would provide fair and equitable access to transit—and thus to increased economic and educational opportunities—to five additional state-defined environmental justice communities (two in Somerville, two in Medford, and one in Arlington). Since the DEIR/EA's environmental justice analysis did not model transit benefits for the proposed project but instead only considered those for alternatives with a Route 16 terminus, it precludes an exact quantification of the potential gain in environmental justice benefits. There can be no doubt, however, that the transit benefits to environmental justice communities would be great.

III. Continued Public Participation

O-009-022

The Green Line Extension has received wide community support and interest. Its supporters not only have strong opinions about important parts of the Project, but also significant knowledge and expertise that bring value to the public process. Citizen involvement is therefore a critical component of moving ahead with the Project.

On December 1, 2009, CLF received a letter from MassDOT seemingly ending the Advisory Group process for the Project and seeking suggestions on the next phase of civic engagement. CLF has welcomed the opportunity to participate in the Advisory Group and therefore urges MassDOT to continue to convene this group regularly as it continues through the MEPA process and beyond. In addition, going forward, we recommend the development of a public participation process to solicit specific, local neighborhood input for each of the new stations and the maintenance facility as the project proceeds to one hundred percent design and through construction.

IV. Conclusion

CLF looks forward to the issuance of the Secretary's DEIR Certificate. Based on conversations with the MEPA Office, it is our understanding that despite MassDOT's announcement on November 17, 2009, that the Secretary's determination on the DEIR/EA will occur by January 22, 2010, the Secretary now intends to issue his Certificate no later than January 15, 2010. Issuance by that day will assure compliance with 301 CMR 11.08(8), the MEPA regulation that requires the Secretary's determination on an EIR to occur within seven days after the close of the public comment period.

Thank you for the opportunity to comment.

Sincerely,

Rafael Mares
Staff Attorney

emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

O-009-022

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Attachment 1

TABLE 1
EOT SIP Air Quality Analysis (2025) for Eastern Massachusetts
By Package and by Project

Scenario	Description	Daily Emissions (in kilograms) 164 Communities in Eastern Massachusetts (EMRPP Study Area)		
		Carbon Monoxide	Nitrogen Oxides	Volatile Organic Compounds
1	**2025 RTP No-build scenario**	1,106,943	28,347	28,984
	Comparison by Package			
2	**Original SIP package of projects** **Green Line Extension to Ball Sq.** **Red-Blue Connector** **Arborway Restoration**	1,106,651	28,340	28,973
	a. Diff (2-1)	-292	-8	-11
	b. 110% of Diff (2-1)	-321.2	-8.8	12.1
6	**Proposed SIP package of projects** **Green Line to Union Sq. & Medford Hillside** **Fairmount Improvements**	1,106,585	28,338	28,969
	a. Diff (6-1)	-358	-9	-15
	b. Additional Parking Spaces	-77	-2	-2
	c. Sum (a+b)	-435	-11	-17
	d. Does it exceed 2 b?	Yes	Yes	Yes
	Comparison by Project			
3	**Arborway Restoration**	1,106,858	28,346	28,977
4	**Green Line Extension to Ball Sq.**	1,106,777	28,346	28,979
5	**Red-Blue Connector**	1,106,787	28,343	28,975
	a. Diff (3-1)	-85	-1	-7
	b. Diff (4-1)	-166	-1	-5
	c. Diff (5-1)	-156	-4	-9
	d. Sum of Diff (a+b+c)	-407	-6	-21
	e. 110% of Diff (d)	-447.7	-6.6	-23.1
7	**Green Line to Union Sq. & Medford Hillside**	1,106,565	28,339	28,967
8	**Fairmount Improvements**	1,106,896	28,346	28,979
	a. Diff (7-1)	-378	-8	-17
	b. Diff (8-1)	-47	-1	-5
	c. Additional Parking Spaces	-77	-2	-2
	d. Sum of Diff (a+b+c)	-502	-11	-24
	e. Does it exceed 5 e?	Yes	Yes	Yes

TABLE 2
EOT SIP Off-Model Analysis of Air Quality Reductions Due to 1,000 Additional Park-and-Ride Spaces

Daily Off-Model Impact of 1,000 Additional Park-and-Ride Spaces on Emissions				
Assumptions		**Assumed**	**Derived**	
	Parking spaces assumed	1,000		
	Utilization	80%		
	Parking spaces utilized		800	
	Avg. trip length (miles), one-way to Boston	8		
	Avg. trip to park-and-ride lot (miles), one-way	1.5		
	Avg. trip VMT reduction (miles), one-way		6.5	
	Avg. trip VMT reduction (miles), two-way		13	
	Daily VMT reduction for all vehicles, two-way		10,400	
	Occupancy per vehicle	1		
	Avg. speed (mph)	23		
MOBILE 6.2 Air Quality (kg)		**Factor (g / mile)**	**Grams * Daily VMT Reduct.**	**Kilograms**
	Carbon monoxide	7.394	-76,898	-76.9
	Nitrogen oxides	0.194	-2,018	-2.02
	Volatile organic compounds	0.22	-2,288	-2.29

Attachment 2

In Search Of Medford Hillside 1891 – 2008

Pages	Section	Abstract
2-5	*Historical Maps from the Medford Public Library Map Collection.*	Places named Hillside are consistently at Winthrop Street or north of it.
6-7	*Modern Maps from the Medford Public Library Map Collection.*	One map showing Medford Hillside north of North Street; one showing Medford Hillside between College Avenue and Winthrop Street northeast of Boston Avenue.
8-11	*ical Excerpts from the Medford Public Library General Reference Holdings.*	A definition of Medford Hillside as the northwesterly slope of College Hill. Mention of Winthrop Street and North Street as the two "rangeways" through the Hillside territory. Mention of Capen Street, Quincy Street, 286 Boston Avenue (all north of Winthrop) and Harold Street and Pinkham Road (both north of North Street) as Medford Hillside.
12-16	*Germane Content from Various Government Agencies.*	Excerpts and maps from the EOT's Beyond Lechmere Study; data and maps from US Geological Survey (USGS) Geographical Names Information System (GNIS); a map from EPA; all showing Medford Hillside situated north of Winthrop Street and closer to North Street than to Winthrop.
17-19	*Contemporary Photographs of locations with "Hillside" in their names.*	Seven photos of landmarks and businesses, all at, or north of Winthrop Street.
20-34	*Modern Maps from Internet Mapping Web Sites.*	Ten maps, all supporting placement of Medford Hillside north of Winthrop Street. A map showing the locations of 127 Hillside businesses, churches and organizations clustering north of Winthrop Street. A table of those businesses with distances from each to a possible station at Mystic Valley Parkway, Winthrop Street and College Avenue. Average distance to College Avenue is roughly twice either Winthrop Street or Mystic Valley Parkway.
35-44	*Newspaper References (Articles, Obituaries, Real Estate Transactions, Classified Ads) Locating Medford Hillside.*	37 excerpts from newspapers from 1889 to 2006 mentioning neighborhood streets and overwhelmingly placing Winthrop Street as the de facto southern boundary of Medford Hillside.

Historical Maps
from the Medford Public Library
Map Collection



Atlas Plate No. 4.
Atlas of Massachusetts
O. W. Walker, C.E.
Geo. H. Walker & Co., Publisher, 1891
(showing Medford Hillside Station at Winthrop Street and Boston Avenue
and College Hill Station at College Avenue and Boston Avenue)



Plates 7, 8 portion of Index Map
(north is upper right corner)
Atlas of the City of Medford
from Official Plans and Actual Surveys
Geo. W. Stadly & Co., Publishers, 1898
(showing distinct Medford Hillside Station and Tufts College Station.
What is now called Hillsdale Road is labeled "Hillside Rd." on this map)

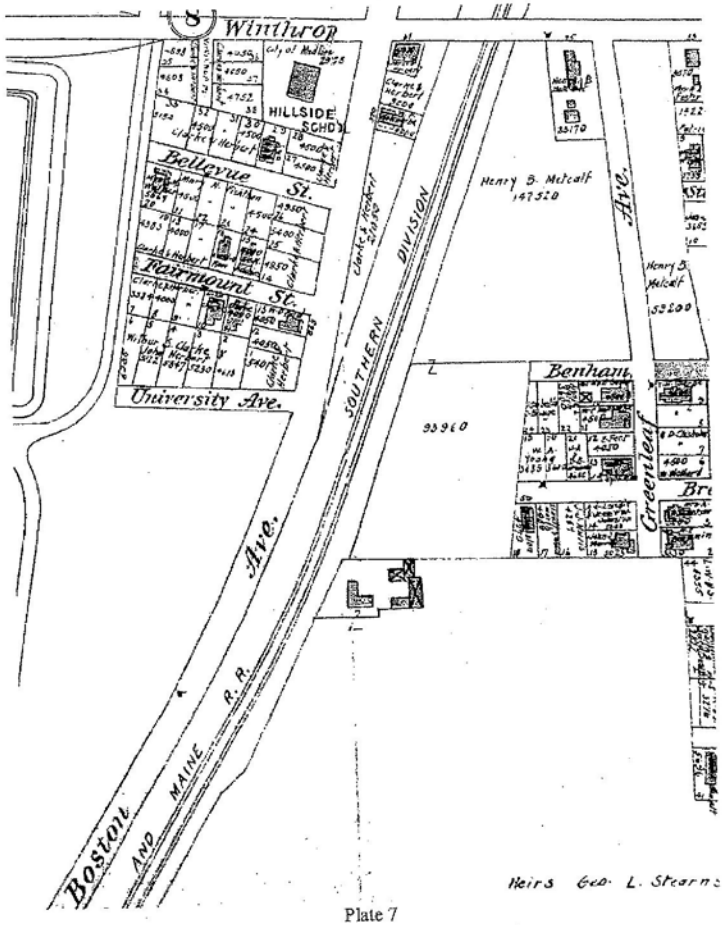


Plate 7
(north is upper right corner)
Atlas of the City of Medford
from Official Plans and Actual Surveys
Geo. W. Stadly & Co., Publishers, 1898
(showing Hillside School at Winthrop Street and Boston Avenue)

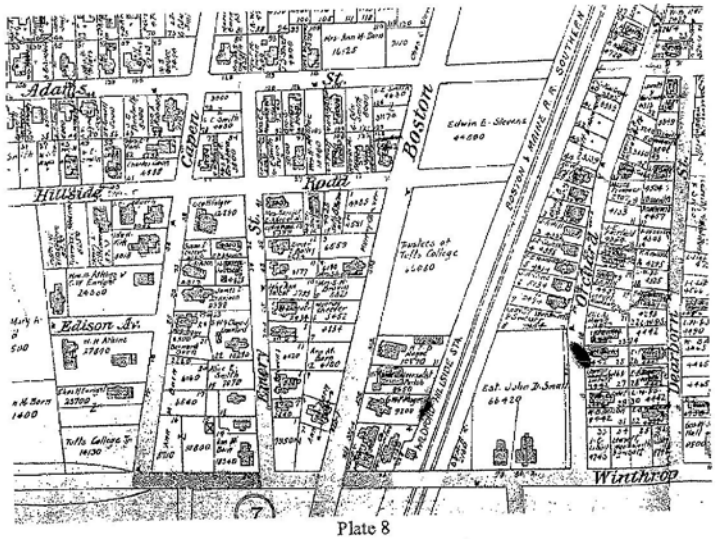
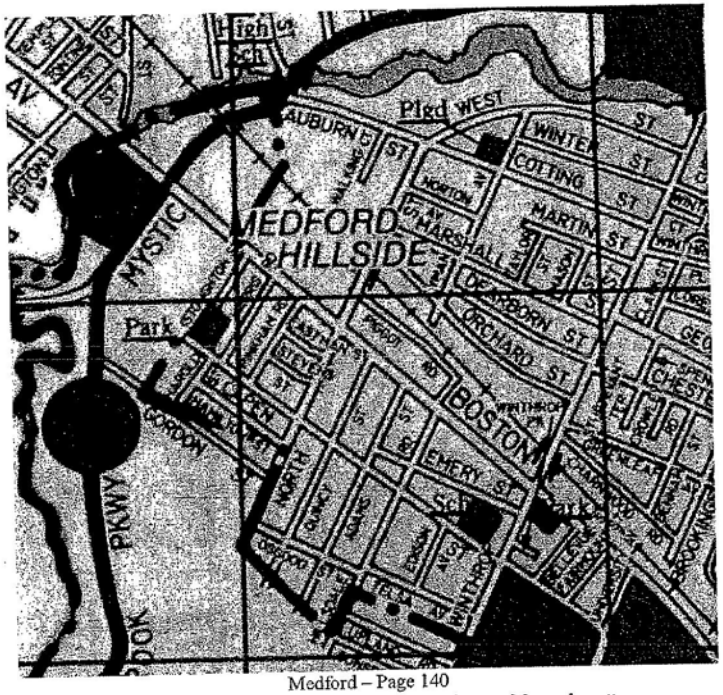


Plate 8
(north is upper right corner)
Atlas of the City of Medford
from Official Plans and Actual Surveys
Geo. W. Stadly & Co., Publishers, 1898
(showing area north of Winthrop Street and Boston Avenue intersection
Including Medford Hillside Station, Hillside Universalist Church and Hillside Road)

Modern Maps
from the Medford Public Library
Map Collection



Medford – Page 146
American Map – Metro Boston – Eighth Edition
(showing Medford Hillside between College Avenue and Winthrop Street, closer to Winthrop Street and east of Boston Avenue)



Medford – Page 140
Universal Atlas of Metropolitan Boston & Eastern Massachusetts
(showing Medford Hillside at Walkling Court,
east of right-of-way, north of North Street)

Historical Excerpts from the Medford Public Library General Reference Holdings

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MEDFORD HILLSIDE.

There are many of them, but the term is distinctively applied to but one, the northwestern slope of Walnut, now for half a century called College hill. As a portion of the so-called Hillside district is included in the level plain beside the railway, and its development has been in a way different from the real Hillside, this sketch will deal with that mainly.

...

From early times there had been two "rangeways" through this territory, from Menotomy road to the Mystic, one became Winthrop street in Medford, the other North street. The first proved the most convenient stopping place for the Medford patrons of the railroad, which laid its track between two towns all the way from Boston to Lowell.

Medford Hillside
Vol. XX 1917, p.5
The Medford Historical Register
Published by Medford Historical Society
(defining Medford Hillside as the northwestern slope of College Hill and traversed by Winthrop and North Streets)

West Medford in 1870
Moses Whitcher Mann

...

Three buildings crowned the top of Walnut Tree Hill, as it was formerly called, the beginning of Tufts College; and the depot across the track, as was also the college site, became known as College Hill.

145

...

Just back from College Hill on the right, sheltered by the trees and hedges, was, and still is, the Stearns residence. With its brick windmill tower it was an attractive sight, to which was added the interest of its connection with another railway, the Underground Railroad of antebellum days.

Passing the old station of Medford Steps with its long stairway—this was on the right hand—and under a bridge now removed, and emerging from the railway cut, the most noticeable object was the First Parish Church, with its several-storied steeple, one of which contained the original town clock presented by Mr. Brooks, while higher up was the bell cast by Paul Revere.

West Medford in 1870
pp. 145, 146
Glimpses of Medford
Selections from the Historical Register
History Press 2007
(describing College Hill depot, in the location proposed for the Green Line Terminus, and Medford Steps, later the site of the Medford Hillside station, as two distinct places)

Historical Excerpts from Various Printed Material Scanned and Indexed Available on the Internet

MEDFORD HILLSIDE

Blackmer, Horace Barnabas [A.B. 1910. *Mus. Ed.*] 34 Capen St.

MEDFORD HILLSIDE (*continued*)

Kimball, Earle Raines [A.B. 1911. *Merc.*] 286 Boston Ave.

Harvard Alumni Directory
Harvard University, Harvard Alumni Association, 1914
(indicating Capen Street and 286 Boston Avenue, both north of Winthrop Street, are in Medford Hillside)

He resides at 68 Quincy street, Medford Hillside, where he bought a house and later built a barn. He is a Republican in politics and a Universalist in religion.

Page 1839
Genealogical and Personal Memoirs
Relating to the Families of Boston and Eastern Massachusetts
edited by William Richard Cutter
Published by Lewis historical publishing company, 1908
(indicating that Quincy Street is in Medford Hillside)

Longo, Domenico	61 Humboldt Ave., Roxbury	B550
Longstreet, George B.	26 Harold St., Medford Hillside	E475
Longwill, James M.	19 Belgrade Pl., Springfield	E174
Loomis, Chas. H.	12 Highland St., Waltham	B1415
Lord, Andrew W.	14 Sanford St., Mattapan	E7511
Arthur O.	Gen. del., Salem	B5090
Eugene R.	67 Washington St., Gloucester	B4323
Geo. G.	49 Hillside Ave., Providence, R. I.	E909
Harry	248 Boylston St., Boston	B1883
Harry S., Jr.	33 Glendale St., Everett	E2068
Peter	20 Acorn St., New Bedford	B4931
Ralph F.	44 Pinkham Rd., Medford Hillside	B11
Robert S.	Griswoldville	E1000
Thomas, Jr.	143 Belleville Rd., New Bedford	E1867
Wm. D.	35 Burrill Ave., Lynn	B1877
Lordán, Dennis F.	527 Medford St., Charlestown	B1410

Laws Relating to Licensing of Electricians and List of Electricians Registered by the Massachusetts State Examiners of Electricians as of Record ...

By Massachusetts State Examiners of Electricians, State Examiners of Electricians, Massachusetts

Published by State Examiners of Electricians, 1921

(indicating that Harold Street and Pinkham Road, both north of North Street, are in Medford Hillside)

Germane Content
from Various Government Agencies

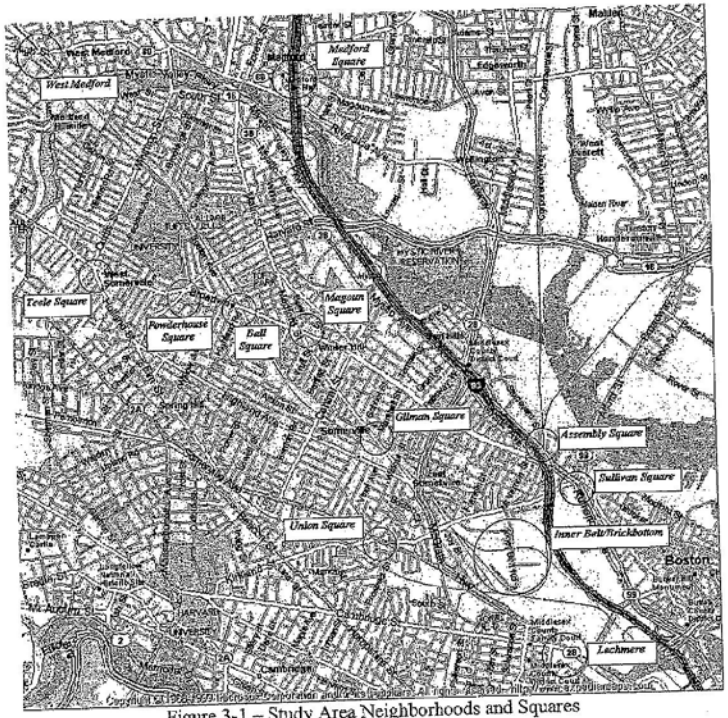


Figure 3-1 – Study Area Neighborhoods and Squares
From section 3.1 Description of Study Area
Beyond Lechmere Northwest Corridor Study
https://www.commentmgr.com/projects/1228/docs/MIS8-05-Chapter3.pdf
(showing Medford Hillside adjacent to Mystic Valley Parkway,
well north of Winthrop and North Streets and southwest of Boston Avenue)

Medford Hillside is the area extending north from Powderhouse Square through Tufts University and over the Mystic River into West Medford. With its residential, educational and commercial land uses, it is an important center in the study area that could support improved transit service. Boston Avenue is a primary roadway through Medford Hillside that has urban centers and activity centers at the intersection of Winthrop Street and along the section from College Avenue to Arlington Street.

3.7.1.1 Existing Land Use Patterns (excerpt) p. 3-44
Beyond Lechmere Northwest Corridor Study
https://www.commentmgr.com/projects/1228/docs/MIS8-05-Chapter3.pdf
(asserting that Medford Hillside follows Boston Avenue continuing to the north bank of the river into West Medford.)

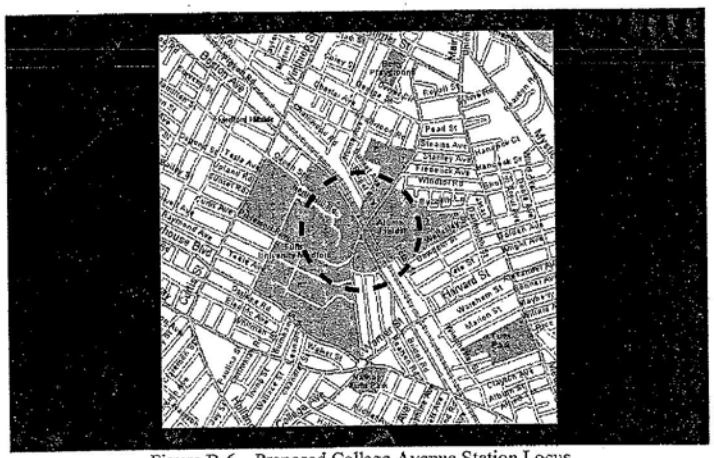


Figure B-6 – Proposed College Avenue Station Locus
Beyond Lechmere Northwest Corridor Study
(showing Medford Hillside at intersection of Capen and Adams Streets, southwest of Boston Avenue, northwest of Winthrop Street, ¾ of a mile from College station)

USGS
Geographic Names Information System (GNIS)

Feature Detail Report

Feature ID:	612779
Name:	Medford Hillside
Class:	Populated Place
Description:	On the right bank of the Mystic River 0.8 mi SW of Medford C.H.; City of Medford.
Citation:	Collected during Phase I data compilation (1976-1981), primarily from U.S. Geological Survey 1:24,000-scale topographic maps (or 1:25K, Puerto Rico 1:20K), various edition dates, and from U.S. Board on Geographic Names files.
Entry Date:	24-Feb-1974
Elevation(ft/m)*:	62/19

Census Code	Class Code	GSA Code	OPM Code
39870	U4	-	-

Class Code Description: Populated (Community) Place (except those associated with facilities). Official common name for a populated location within an incorporated place.

Counties

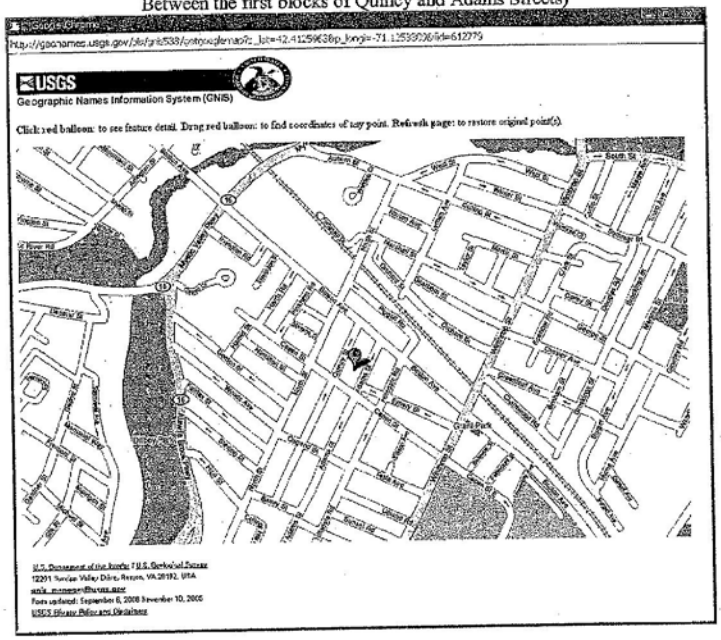
Sequence	County	Code	State	Code	Country
1	Middlesex	017	Massachusetts	25	US

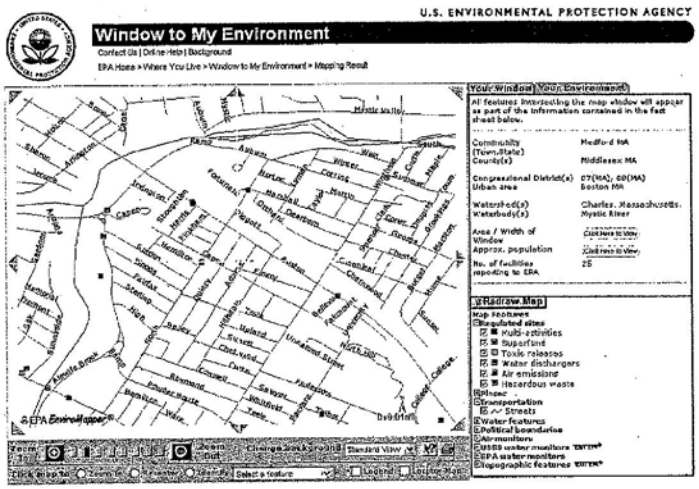
Coordinates (One point per USGS topographic map containing the feature, NAD83)

Sequence	Latitude(DEC)	Longitude(DEC)	Latitude(DMS)	Longitude(DMS)	Map Name
1	42.4125963	-71.1253309	422445N	0710731W	Lexington

http://geonames.usgs.gov/pls/gnispublic/f?p=gnispq:3:::NO::P3_FID:612779
(revealing Latitude / Longitude coordinates)

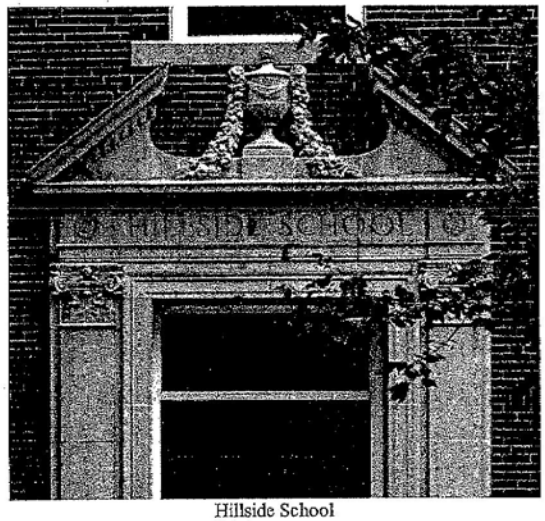
Medford Hillside by Latitude and Longitude
U. S. Geological Survey (USGS)
Geographical Names Information System (GNIS)
http://tinyurl.com/5g4mkr
(showing Medford Hillside southwest of Boston Avenue
Between the first blocks of Quincy and Adams Streets)



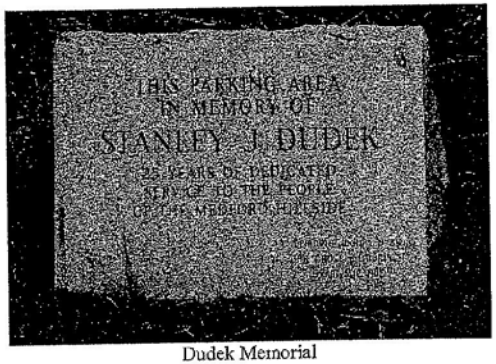


Medford Hillside by Latitude and Longitude
USGS / GNIS data on EPA EnviroMapper (crosshairs added)
http://tinyurl.com/65q6a9
(showing Medford Hillside southwest of Boston Avenue
Between the first blocks of Quincy and Adams Streets)

Contemporary Photographs
of locations with "Hillside" in their names



Hillside School
15 Capen Street
(placing Medford Hillside north of Winthrop Street)



Dudek Memorial
Between 308 and 320 Boston Avenue
(placing Medford Hillside north of Winthrop Street)



Hillside Cleaners
334 Boston Avenue
(placing Medford Hillside at Winthrop Street and Boston Avenue)



Hillside Real Estate
308 Boston Avenue
(placing Medford Hillside north of Winthrop Street)



Hillside Business Services
308 Boston Avenue
(placing Medford Hillside north of Winthrop Street)

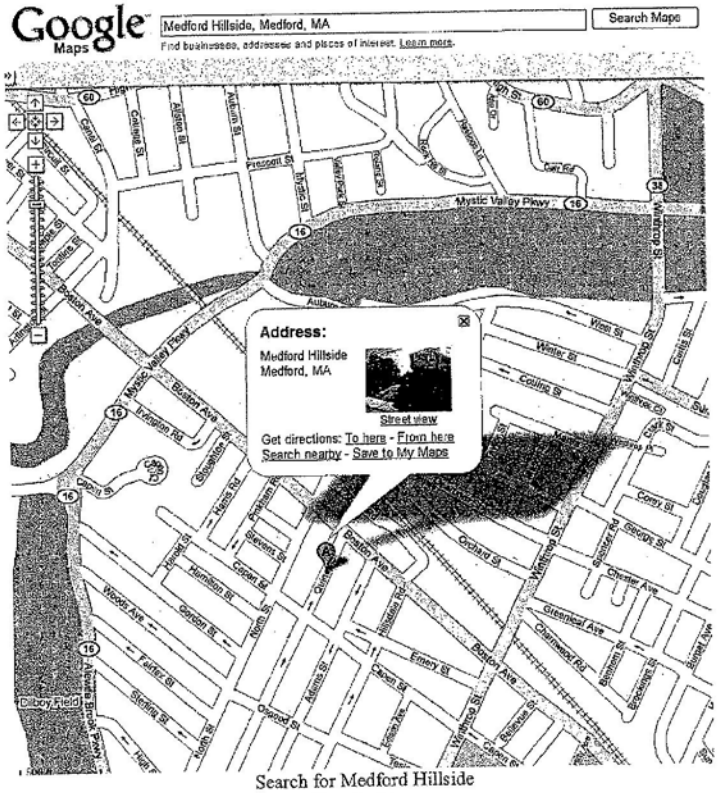


Hillside Hardware
325 Boston Avenue
(placing Medford Hillside north of Winthrop Street)



Hillside Wine & Spirits
323 Boston Avenue
(placing Medford Hillside north of Winthrop Street)

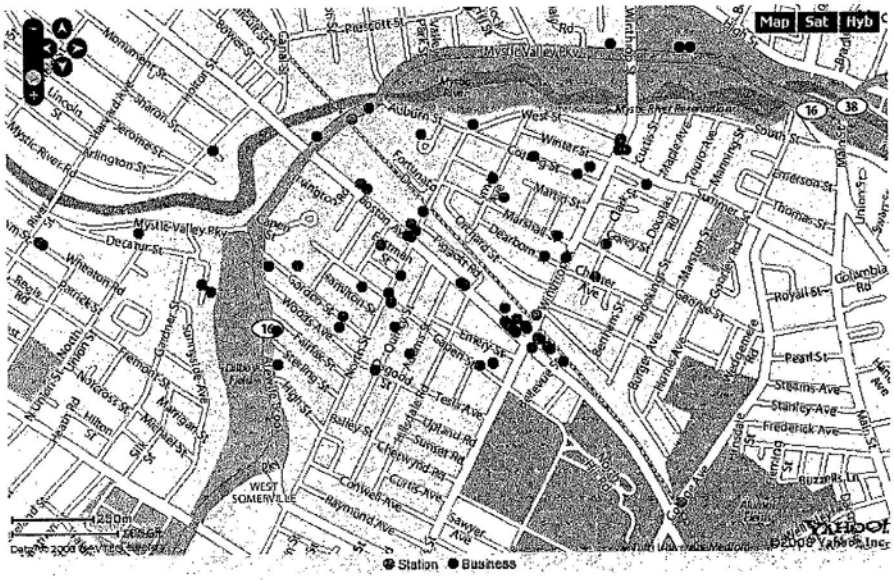
Modern Maps from Internet Mapping Web Sites



Search for Medford Hillside
Google Maps
http://tinyurl.com/5b5kbq
(locating Medford Hillside in the first block of Quincy Street, west of Boston Avenue, north of Winthrop Street)

Medford Hillside Businesses
BatchGeocode plot of CitySquares data
http://tinyurl.com/666sn9
(showing Medford Hillside surrounding
Boston Avenue north of Winthrop Street to the river)

BatchGeocode.com plot of Medford Hillside Businesses as identified by CitySquares.com



Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
24 Hour A 1 Emerg Medford Lo...	178 Winthrop St	Medford	0.33	0.49	0.65
A Airport Service	81 Quincy St	Medford	0.31	0.46	0.61
A Cab	81 Quincy St	Medford	0.31	0.46	0.61
Abbas Place	241 Boston Ave	Medford	0.27	0.23	0.69
American Access Care	200 Boston Ave	Medford	0.38	0.13	0.80
American Legion	321 Winthrop St	Medford	0.73	0.58	1.06
Americas Finest Construction	181 Winthrop St	Medford	0.34	0.50	0.64
Ancora Pharmaceuticals	200 Boston Ave	Medford	0.38	0.13	0.80
Andreas House Of Pizza	352 Boston Ave	Medford	0.07	0.55	0.37
Ant Hill Technologies Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Azzarello Joe Plaster Co Inc	53 Marshall St	Medford	0.22	0.31	0.64
Base Two Investment Systems ...	196 Boston Ave	Medford	0.40	0.12	0.82
Betty & Helens Nail Salon	243 Boston Ave # A	Medford	0.84	1.00	0.96
Brainshift Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Brookside Condominium Associ...	1 Arizona Ter	Arlington	0.59	0.41	0.93
Bsm Livery Service	16 Cotting St	Medford	0.27	0.42	0.62
Bureau Art	216 High St	Medford	0.61	0.53	0.94
Burnham Corp	14 Marshall St	Medford	0.15	0.43	0.53
C 3 Technologies	29 Hamilton St	Medford	0.32	0.31	0.70
Cadnexus	200 Boston Ave	Medford	0.38	0.13	0.80
Calveric Barbara R	196 Boston Ave	Medford	0.40	0.12	0.82
Celtic Floor Craft	90 North St	Medford	0.26	0.30	0.65
Clean N Brite Laundromat	317 Boston Ave	Medford	0.06	0.47	0.45
Cleaning Solution	165 Sharon St	Medford	0.66	0.26	1.06
Clevergreen Cleaners	152 North Street	Medford	0.26	0.34	0.64
Cotting Plumbing & Heating C...	9 Cotting St	Medford	0.28	0.44	0.63
Cozy Corner Makes Scents Cer...	317 Boston Ave	Medford	0.06	0.47	0.45
Craddock Cove Condominium	2500 Mystic Valley Pkwy	Medford	0.55	0.61	0.83
Danish Pastry House	330 Boston Ave	Medford	0.03	0.49	0.42
Decatur Gardens	85 Decatur St	Arlington	0.74	0.44	1.10

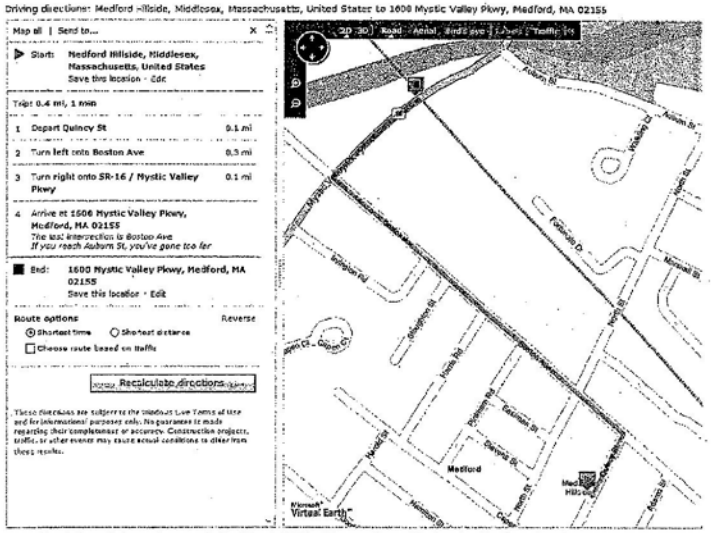
Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Doucettes Gas	325 Alewife Brook Pkwy	Somerville	0.48	0.46	0.77
East Coast Roofing Repair	14 Wolcott Park	Medford	0.57	0.29	0.98
Eligix Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Elizabeth Grady Of Medford	55 North St	Medford	0.28	0.21	0.70
Emergency Locksmith A	325 Alewife Brook Pkwy	Somerville	0.48	0.46	0.77
Espresso Pizza	336 Boston Ave	Medford	0.04	0.52	0.39
Family Center Incorp The Som	18 Dearborn St	Medford	0.11	0.43	0.51
Filteau Theodore Plano Tunin...	26 Pinkham Rd	Medford	0.31	0.24	0.72
G Creabtive Studios	105 North St	Medford	0.27	0.32	0.65
Gervais & Davenport PC	200 Boston Ave	Medford	0.38	0.13	0.80
Gnomon Copy	348 Boston Ave	Medford	0.06	0.54	0.37
Goldstar Convenient Store	319 Boston Ave	Medford	0.05	0.47	0.45
Health Care Source	196 Boston Ave	Medford	0.40	0.12	0.82
Helens Roast Beef & Pizzarin...	321 Boston Ave	Medford	0.05	0.48	0.44
Hillside Business Services	308 Boston Ave	Medford	0.06	0.44	0.48
Hillside Cleaners Inc	334 Boston Ave	Medford	0.04	0.52	0.39
Hillside Real Estate	308 Boston Ave	Medford	0.06	0.44	0.48
Hillside Wine & Spirits	323 Boston Ave	Medford	0.05	0.48	0.44
Immunosaccharde Technologies...	200 Boston Ave	Medford	0.38	0.13	0.80
Interactive Constructs	200 Boston Ave	Medford	0.38	0.13	0.80
Intergrated Health Services	300 Winthrop St	Medford	0.63	0.56	0.95
Jackson Home Inspection	12 Essex St	Medford	0.64	0.49	0.99
Krasner Sami	67 Gordon St	Somerville	0.44	0.29	0.82
Lily Nail	315 Boston Ave	Medford	0.06	0.46	0.46
Lussiano Mary	85 Decatur St	Arlington	0.74	0.44	1.10
Mahoney Phylis	85 Decatur St	Arlington	0.74	0.44	1.10
Mars Cherne	14 Arizona Ter	Arlington	0.61	0.41	0.95
Martel Paul W & Paula	23 Yale Rd	Arlington	0.90	0.60	1.25
Martinez & Daughters Woodwor...	49 Quincy St	Medford	0.26	0.39	0.61
Mass Drapery & Blind Of Medf...	152 North St	Medford	0.26	0.34	0.64

Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Master Williams Barber Shop	281 Boston Ave	Medford	0.15	0.36	0.56
McGrath Wm J Insurance Agcy	53 Adams St	Medford	0.24	0.44	0.56
Medford Housing Authority	4 Walkling Ct	Medford	0.39	0.13	0.82
Mide Technology Corporation	200 Boston Ave	Medford	0.38	0.13	0.80
Mobil Mart Plus	379 Alewife Brook Pkwy	Somerville	0.49	0.31	0.86
Mochi Richard J & Son Electr...	47 Lyman Ave	Medford	0.26	0.28	0.68
Monumental Research Inst	240 Boston Ave	Medford	0.27	0.23	0.69
Moultons Seafood & Lobster M...	178 Winthrop St	Medford	0.33	0.49	0.65
Mvp Liquors	2153 Mystic Valley Pkwy	Medford	0.48	0.04	0.91
N C Electrical Services	184 Winthrop St	Medford	0.35	0.49	0.66
Nanobiosym	200 Boston Ave	Medford	0.38	0.13	0.80
Natural Dent In	196 Boston Ave Ste 3900	Medford	0.40	0.12	0.82
Nelson Group Construction	165 Sharon St	Medford	0.66	0.26	1.06
New Life Baptist Church	320 Boston Ave	Medford	0.04	0.47	0.45
Nolan James R & Joyce T	343 Alewife Brook Pkwy	Somerville	0.47	0.41	0.80
North Street Union Cong Chur...	144 North St	Medford	0.26	0.34	0.64
On Line Sales	240 Boston Ave	Medford	0.27	0.23	0.69
Parlance Corp	200 Boston Ave	Medford	0.38	0.13	0.80
Pasquale Bros Auto Body	364 Boston Ave	Medford	0.10	0.58	0.33
Pasta Pisa	285 Boston Ave	Medford	0.14	0.36	0.56
Phillips David Sculpture Stu...	236 Boston Ave	Medford	0.28	0.22	0.70
Port Maia	66 Clark St	Medford	0.31	0.55	0.58
Pranzis	186 Winthrop St	Medford	0.35	0.49	0.67
Properties Cummings	196 Boston Ave	Medford	0.40	0.12	0.82
Prospect Properties Co Inc	93 West St	Medford	0.36	0.22	0.78
Real Time Innovations	196 Boston Ave	Medford	0.40	0.12	0.82
Rice Robert G PC	196 Boston Ave Ste 2000	Medford	0.40	0.12	0.82
Robert L Oneil CPA	2424 Mystic Valley Pkwy	Medford	0.51	0.49	0.84
Roi Solutions	196 Boston Ave	Medford	0.40	0.12	0.82
Rons Amusements	41 Woods Ave	Somerville	0.36	0.38	0.70

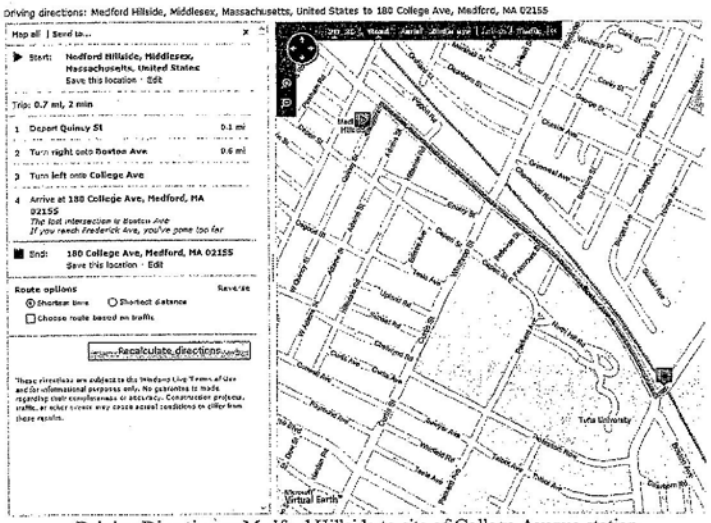
Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Roses Restaurant	321 Boston Ave	Medford	0.05	0.48	0.44
Rowenta	196 Boston Ave	Medford	0.40	0.12	0.82
Sacred Heart Rectory	55 Winthrop St	Medford	0.06	0.53	0.39
Saint Josephs	2520 Mystic Valley Pkwy	Medford	0.56	0.63	0.82
Saint Josephs	2520 Mystic Valley Pkwy	Medford	0.56	0.63	0.82
Sav Mor Liquors	2153 Mystic Valley Pkwy	Medford	0.48	0.04	0.91
Select Rehab	300 Winthrop St	Medford	0.63	0.56	0.95
Serpa Construction	52 Cotting St	Medford	0.29	0.34	0.68
Shafa Physical Therapy Clini...	196 Boston Ave	Medford	0.40	0.12	0.82
Shepherd Realty	248 High St	Medford	0.60	0.46	0.96
Sillari Insurance Agency	315 Boston Ave	Medford	0.06	0.46	0.46
Sleep Healthcenters	200 Boston Ave	Medford	0.38	0.13	0.80
Solutions For Living	200 Boston Ave	Medford	0.38	0.13	0.80
St Josephs Nursery School	2520 Mystic Valley Pkwy	Medford	0.56	0.63	0.82
Starbucks Coffee	2151 Mystic Valley Pkwy	Medford	0.48	0.04	0.91
The Horn Book Inc	24 Gordon St	Somerville	0.35	0.36	0.70
The Laundry Mat	281 Boston Ave	Medford	0.15	0.36	0.56
The Nicolas Call Salon & Spa	243 Boston Ave	Medford	0.27	0.24	0.69
The Tasty Gourmet	321 Boston Ave # B	Medford	0.84	1.00	0.96
This Old Tub & Sink	161 George St	Medford	0.18	0.51	0.49
Tissue Regeneration Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Tony Barones Carpentry	29 Hamilton St	Medford	0.32	0.31	0.70
True Value Hardware	325 Boston Ave	Medford	0.05	0.49	0.43
Tufts University	28 Capen St	Medford	0.14	0.50	0.44
Tufts Variety Store Inc	285 Boston Ave	Medford	0.14	0.36	0.56
U Haul Company	600 Mystic Valley Pkwy	Somerville	0.51	0.07	0.94
Ullas Flowers & Gifts	328 Boston Ave	Medford	0.03	0.49	0.43
Ultimate Barber Shop	328 Boston Ave	Medford	0.03	0.49	0.43
Walnut Hill Properties	15 Capen St	Medford	0.12	0.51	0.43
Waterman Jason	11 Yale Rd	Arlington	0.91	0.61	1.26

Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Wesley United Methodist Chur...	100 Winthrop St	Medford	0.12	0.46	0.49
Western Union	319 Boston Ave	Medford	0.05	0.47	0.45
Winthrop House Senior Care L...	300 Winthrop St	Medford	0.63	0.56	0.95
Wireless Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Workout World	200 Boston Ave	Medford	0.38	0.13	0.80
Workplace Strategies	15 Chester Ave	Medford	0.13	0.53	0.44
Zion Christian Fellowship	320 Boston Ave	Medford	0.04	0.47	0.45

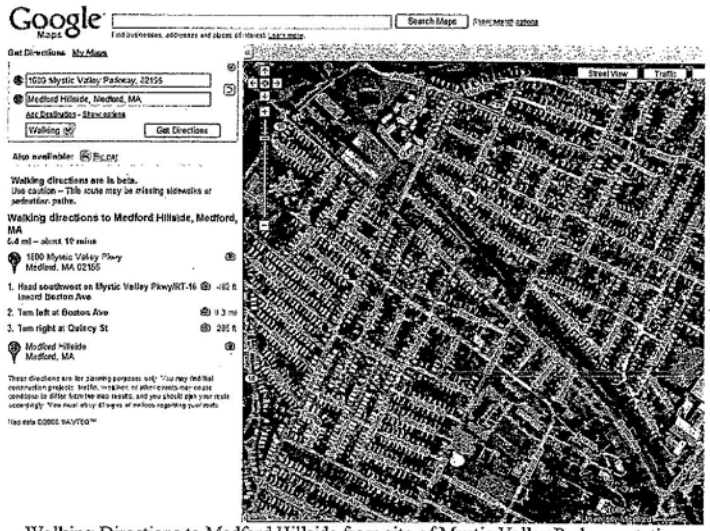
	Distance (miles) to station at Winthrop	MVP	College
Minimum	0.03	0.04	0.33
Average	0.34	0.37	0.71
Maximum	0.91	1.00	1.26



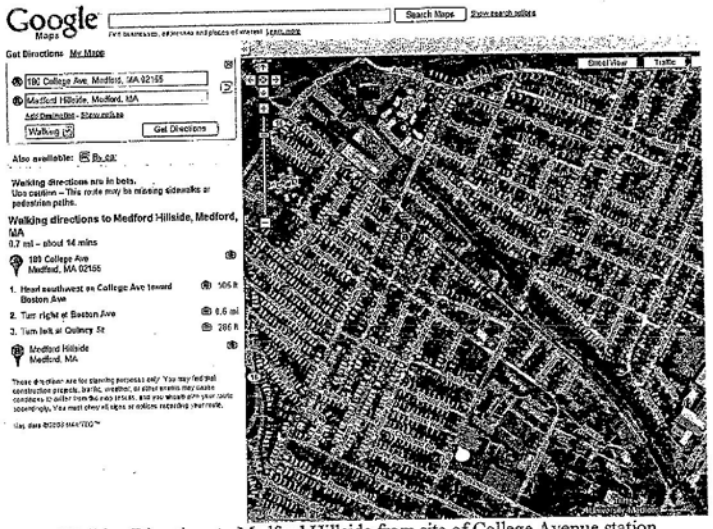
Driving Directions – Medford Hillside to site of Mystic Valley Parkway station
Microsoft Live Search Maps
http://tinyurl.com/6dxa2f
(showing 0.4 mile distance between Hillside and MVP station)



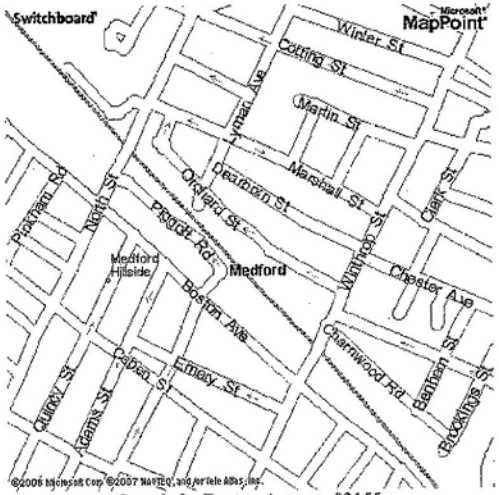
Driving Directions – Medford Hillside to site of College Avenue station
Microsoft Live Search Maps
http://tinyurl.com/5j9bhh
(showing 0.7 mile distance between Hillside and College station)



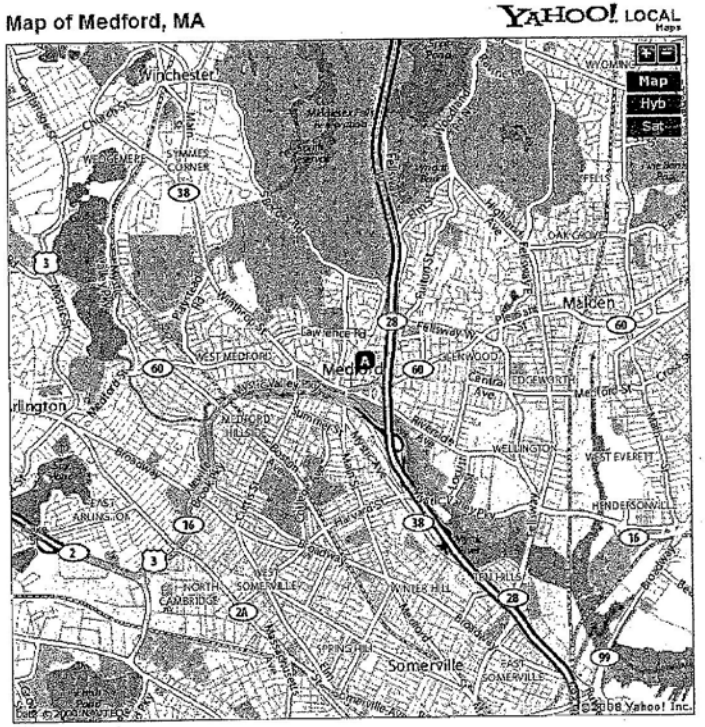
Walking Directions to Medford Hillside from site of Mystic Valley Parkway station
Google Maps
http://tinyurl.com/5cqu4y
(showing 0.4 mile, 10 minute walk from Hillside to MVP station)



Walking Directions to Medford Hillside from site of College Avenue station
Google Maps
http://tinyurl.com/5zmens
(showing 0.7 mile, 14 minute walk from Hillside to College station)



Search for Boston Avenue, 02155
MapsOnUs.com
http://tinyurl.com/55jpf9
(showing Medford Hillside west of Boston Avenue, north of Winthrop Street)



Search for Medford, MA
Yahoo! Local Maps
http://tinyurl.com/672cg3
(showing Medford Hillside on Boston Avenue
between Winthrop Street and Mystic Valley Parkway)

Medford, MA (Medford Hillside)

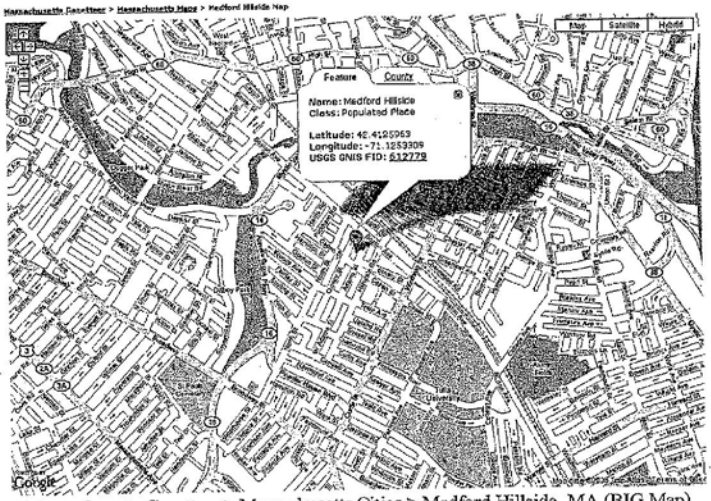
Found within zip code: 02155



Medford Hillside

http://www.neighborhoodscout.com/ma/medford/medford-hillside/

(showing Medford Hillside bounded by Winthrop Street, Mystic River and Somerville)



Massachusetts Gazetteer > Massachusetts Cities > Medford Hillside, MA (BIG Map)
MA HomeTownLocator
http://massachusetts.hometownlocator.com/MA/Middlesex/Medford-Hillside.cfm
http://tinyurl.com/5u82op
(showing Medford Hillside in first block of Adams Street
southwest of Boston Avenue)

Newspaper References (Articles, Obituaries, Real Estate Transactions, Classified Ads) Locating Medford Hillside

AUSTIN.—In Medford Hillside, George H. Austin, 60 yrs. 2 mos. Funeral Tuesday, at 11 o'clock, from his late residence, 7 Quincy st. Relatives and friends invited. Train leaves Boston via Bos. & Lowell railroad at 10 15.

Nov 19, 1889. p.8
Boston Daily Globe
(indicating that Quincy Street, North of Winthrop Street, is in Medford Hillside)

ATKINS.—In Medford Hillside, Aug. 16, George H. Atkins, 55 yrs. 11 mos. 24 ds. Funeral private at his late residence, Capen st., Sunday, Aug. 17, at 4 o'clock p. m. The remains will be taken to Waterville, Me., for interment.

Aug 19, 1890. p.6
Boston Daily Globe
(indicating that Capen Street, north of Winthrop Street, is in Medford Hillside)

G. Marlon Keene has sold for Murray Cheever a large lot of land on Emery st, Medford Hillside, to Elmer E. Bailey. The same dealer has sold for Lewis H. Lovering an estate on Boston av. West Medford, to T. F. Keefe.

Jun 3, 1894. p.10
Boston Daily Globe
(indicating that Emery Street, north of Winthrop Street, is in Medford Hillside)

Mr Leland has also sold for H. M. Holmes a new dwelling house and 5000 feet of land at the corner of Hillside road and Capen st, Medford Hillside, to Wellington O. Sawyer for $4500.

Aug 2, 1896. p.10
Boston Daily Globe
(indicating that Capen Street at Hillside Road, north of Winthrop Street, is in Medford Hillside)

MEDFORD, June 26—Surrounded by children and grandchildren and many guests, Mr and Mrs Charles M. Bradford observed the 50th anniversary of their marriage at their home on Hillsdale road, Medford Hillside, tonight.

Jun 27, 1903. p.3
Boston Daily Globe
(indicating that Hillsdale Road, north of Winthrop Street, is in Medford Hillside)

BAIN—In Medford Hillside, Nov 2, Bernard Bain, 65 yrs 10 mos. Funeral Wednesday at 2 p m, from his late residence, 50 Winthrop st, Medford, Mass.

Nov 3, 1903. p.11
Boston Daily Globe
(indicating that Winthrop Street is in Medford Hillside)
Boston Daily Globe

The estate, 44 Marshall st, Medford Hillside, consisting of a frame house of eight rooms and 5000 square feet of land, has been sold by Margaret E. Roberts to Mabel M. Cross, who buys for a home. The assessed value is $2700, and the price was above this figure. Shepard & Morse, Old South building, were the brokers.

Oct 1, 1905. p.16
Boston Daily Globe
(indicating that Marshall Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD, March 13—Mrs Carrie B. Grant, aged 43, wife of Albert M. Grant, died at her home, 130 Winthrop st, Medford Hillside, this afternoon, after a brief attack of peritonitis.

Mar 14, 1907. p.11
Boston Daily Globe
(indicating that Winthrop Street is in Medford Hillside)

Hillside runs from the Mystic River in the north to Tufts University in the south. East to west, the neighborhood extends from College Avenue in the east to the Somerville line in the west.

Sep 2, 2005. p.043
Boston Herald
(describing College Avenue as southern boundary of Medford Hillside)

With his clear path to a second term, Sciortino is working on a list of bills he plans to file next January, with topics ranging from education funding, consumer protection, and civil rights.

Meanwhile, Sciortino, who bought a home in the Medford Hillside neighborhood, said he is enjoying his new home city.

"I love it. I love the neighborhood. There's a lot of local shops here. It's walk-able to public transportation, and there are good neighbors."

Oct 12, 2006. p.GNW.1

Boston Daily Globe

(indicating that Orchard Street, Sciortino's home, is in Medford Hillside)

MEDFORD, Dec 16—Miss Catherine C. Leary, aged 31, daughter of Mr and Mrs Daniel Leary of 271 Boston av, Medford Hillside, and sister of Albert Leary of Arlington, Georgetown and Medford High football star, and of William Leary, former captain of the Medford High football team and a member of the Holy Cross football team, died at her parents' residence today, after several months' illness.

Dec 16, 1925. p. A10

Boston Daily Globe

(indicating that 271 Boston Avenue, between Winthrop and North Streets, is in Medford Hillside)

MEDFORD, Dec 8—Funeral services for Miss Gertrude I. Kelley, 18, daughter of Mr and Mrs Walter H. Kelley of 16 North st, Medford Hillside, and formerly a pupil at the Center Junior High School, were held today at St Raphael's Church, West Medford.

Dec 8, 1925. p. A2

Boston Daily Globe

(indicating that North Street is in Medford Hillside)

MEDFORD, Dec 5—Funeral services for Mrs Melen Cotting, 53, wife of Edward W. Cotting of 30 Hume av, Medford Hillside, who died yesterday at the Brooks Hospital, Brookline, will take place at 2 tomorrow afternoon at St Joseph's Church.

Dec 5, 1925. p. A4
Boston Daily Globe
(indicating that Hume Avenue is in Medford Hillside)

The registrars of voters announced today that registration for the special election on Nov 17, to fill the vacancy in the Board of Aldermen, caused by the resignation of Alderman E. C. Blake of Ward 4, will begin Monday, Oct 19, and will end at 10 p m on Oct 28. Registration will take place at the office of City Clerk Winslow during office hours. Evening sessions will be held by the registrars on Oct 23, 26 and 28 from 7:30 to 9, at the Medford Building, and on Oct 23 at the Medford Hillside Ward 4 polling place, corner Greenleaf av and Winthrop st.

Oct 7, 1925. p. 6A
Boston Daily Globe
(indicating that Greenleaf Avenue and Winthrop Street is in Medford Hillside)

MEDFORD, Oct 23—Funeral services for Henry V. Rowell, aged 84, a retired business man, who was the first New England manager for the Remington Typewriter Company, will be held at 2 o'clock tomorrow afternoon at his late residence, 55 Quincy st, Medford Hillside, where he died yesterday after several months' illness.

Oct 23, 1925. p. A10
Boston Daily Globe
(indicating that Quincy Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD HILLSIDE—5 rooms, lower apartment, all improvements, hardwood floors, steam heat, on direct car line; reasonable rent, adults preferred. Address 170 Boston av., Medford Hillside, Mass. WFSu* n18

Nov 18, 1925. p. A30
Boston Daily Globe
(indicating that 170 Boston Avenue, north of North Street, is in Medford Hillside)

A DANDY TENEMENT, $40; another, $38; 5 rooms, electricity; daily location; all improvements. 8 Mason st., Medford Hillside, off Marshall st., near Winthrop av. n17

Nov 18, 1925. p. 30
Boston Daily Globe
(indicating that Mason Street, north of Winthrop Street, is in Medford Hillside)

McCARTHY—In Medford Hillside, Sept. 27, Owen E., husband of Elizabeth A. McCarthy. Funeral from his late residence, 69 Quincy st., Wed., Sept. 30, at 8:15. Solemn high mass at St. Raphael's Church at 9 o'clock. Relatives and friends invited. Norwood, N. Y., papers please copy.

Sep 29, 1925. p. 24
Boston Daily Globe
(indicating that Quincy Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD, Dec 2—The body of the man found dead and badly mangled at 6 o'clock this morning on the outward-bound tracks of the Boston & Maine Road, between Tufts College and the Medford Hillside Stations, was identified by his parents tonight as Albert W. Stewart, of 13 Fairmount st, Medford Hillside.

Dec 3, 1913. p. 18
Boston Daily Globe
(indicating that 13 Fairmount Street is in Medford Hillside)

WEST MEDFORD, July 27—Enough rocks to have seriously disabled a number of electric cars were found on both tracks of the Medford Hillside and Tufts College line late this evening, but they were all removed before any damage was done. They are supposed to have represented the work of mischievous boys

Jul 28, 1912. p. 9
Boston Daily Globe
(representing Tufts College and Medford Hillside as distinct places)

At the Somerville Hospital it was said that he would recover. In his pocket was found a note written in pencil saying, "In case of death notify my mother, Mrs. H. B. Wood, 119 Capen st, Medford Hillside."

May 26, 1925. p. 9
Boston Daily Globe
(indicating that Capen Street, north of Winthrop Street, is in Medford Hillside)

Announcement is made of the engagement of Miss Alberta Louise Libby, daughter of Mrs Fannie Libby of 29 Brookings st, Medford Hillside, to Earle L. Hadley of 118 Massachusetts av, East Lexington.

May 27, 1925. p. A11
Boston Daily Globe
(indicating that Brookings Street is in Medford Hillside)

MEDFORD HILLSIDE
NEAR TUFTS COLLEGE
FOR RENT, 6 beautiful rooms and bath, all modern conveniences, No. 32 Tesla av., Medford Hillside. Evenings tel. East Boston 1637-W.

Jun 3, 1925. p. 24
Boston Daily Globe
(indicating that Tesla Avenue, north of Winthrop Street, is in Medford Hillside)

BENJAMIN NELSON, 42, of 29 Harris rd, Medford Hillside, overcome at Auburn st and Mystic Valley Parkway. Treated at Lawrence Hospital and sent home.

Jun 6, 1925. p. 10
Boston Daily Globe
(indicating that Harris Road, between North Street and Mystic Valley Parkway, is in Medford Hillside)

Mrs. Elizabeth Needham Buswell,
5 Peterboro St., Boston, Mass.
Mary L. Castellon, 60 Marshall St.,
Medford Hillside, Mass.
Mrs. Frank E. Chapman,
Shelburne Falls, Mass.

Jun 9, 1925. p. A19
Boston Daily Globe
(indicating that Marshall Street, between Winthrop and North Streets, is in Medford Hillside)

MEDFORD, Jan 25—Miss Ruth L. Griggs, daughter of Mrs E. G. Griggs of 9 Taylor st, Medford Hillside, and George Albert Pirkey, machinist's mate, first class, U. S. S. America, son of Mr and Mrs James C. Pirkey of Newark, N J, were married tonight by Rev Clarence R. Skinner at the latter's home, 102 Powder House boulevard, Somerville. Miss Esther Ford of Medford was bridesmaid. Chief Machinist's Mate George A. Thurlow of the America was best man.

Jan 26, 1919. p. 6
Boston Daily Globe
(indicating that Taylor Street, between Winthrop and North Streets, is in Medford Hillside)



Frederick W. McGowan.

MEDFORD, Feb 1—Frederick W McGowan of 144 Winthrop st, Medford Hillside, former secretary of the Hillside Men's Club and of the Board of Trade and a well-known Medford and Boston attorney, has just arrived home from a short trip to Maine, following his return from France on the steamship La Lorraine. Mr McGowan is recuperating from nine months' work with the American Red Cross in the hospital and supply zone areas of France.

Feb 2, 1919. p. 16
Boston Daily Globe
(indicating that Winthrop Street is in Medford Hillside)

Col Logan requested all former officers of the 1st Battalion to communicate with Maj Gray, 41 Quincy st, Medford Hillside; of the 2d Battalion with Maj T. F. Foley, 84 Lowell st, Worcester, and of the 3d Battalion with Maj Hanson, 26 Boynton st, Waltham.

Sep 16, 1919. p. 18
Boston Daily Globe
(indicating that Quincy Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD, Nov 10—Charles H. MacNear, a widely-known resident of Medford Hillside, father of Alderman Harry M. MacNear, died suddenly today at Mechanics Falls, Me, from acute indigestion.

Mr MacNear formerly lived in Winchester where he served for a short time as a police officer. He worked at the Charlestown Navy Yard for many years. He was a member of the Grand Army. For some time he had lived at 30 Orchard st. He is survived by four sons and two sisters.

Nov 11, 1919. p. 8

Boston Daily Globe

(indicating that Orchard Street, between Winthrop and North Streets, is in Medford Hillside)

MEDFORD, Feb 12—The seventh annual "Bingville Dance" of the residents of the Hillside district was held tonight at the Hillside Men's Clubhouse hall, Winthrop st. More than 350 persons, the majority of them in farmer costume, were present. The dance is held annually as a preliminary to the fair of the Hillside Universalist Church, which opens next Friday, for the benefit of the church debt fund.

Feb 13, 1916. p. 3

Boston Daily Globe

(locating the Hillside Men's Clubhouse hall at Winthrop Street)

MEDFORD, Aug 25—Earle H. MacLeod, principal of the Howard High School, Carver, and son of Mr and Mrs Osbourne MacLeod of 22 Whitney st, Cliftondale, was married at 7:30 o'clock tonight to Miss Mildred Wright Sproul, daughter of Mr and Mrs Augustus O Sproul of 25 Capen st, Medford Hillside, and only other teacher at the Howard High School.

Aug 26, 1923. p. 16

Boston Daily Globe

(indicating that Capen Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD HILLSIDE

HIGH elevation, six rooms, upper flat, steam heater, tiled bath, front and back piazzas, covered hardwood floors, new house, adults preferred, rent $35. 16 Tesla av.; phone Mystic 1183-J.

Sep 2, 1923. p. 39
Boston Daily Globe
(indicating that Tesla Avenue, west of Winthrop Street, is in Medford Hillside)

MEDFORD HILLSIDE

4-5-ROOM SUITES, improvements, $40-$43-$48. 105 Sharon st.

Dec 9, 1925. p. 34
Boston Daily Globe
(indicating that Sharon Street, well north of North Street, is in Medford Hillside)

MEDFORD HILLSIDE—$38 to small family, 5 rooms, electricity, open plumbing, hardwood floors, refinished. 8 Mason st., 10-2. 4t* jy29

Jul 30, 1925. p. A22
Boston Daily Globe
(indicating that Mason Street, north of Winthrop, is in Medford Hillside)

COLLEGE STUDENTS' rooming house of 9 rooms; adjacent to Tufts College, sacrificed by young widow; $1200 cash, balance easy terms. Apply 11 Fairmount st., Medford Hillside. 1 SuW jy17

Jul 17, 1925. p. A16
Boston Daily Globe
(indicating that Fairmount Street is in Medford Hillside)

Funeral services will be conducted from Gaffey Memorial Funeral Home, 43 High st., Medford, at 8 a.m. Monday. A funeral Mass will follow at 10 in Sacred Heart Church, Medford Hillside. Interment will be in Oak Grove Cemetery.

Oct 18, 1980. pg. 1
Boston Daily Globe
(indicating that Sacred Heart Church, which was on Winthrop Street, is in Medford Hillside)

A funeral Mass will be said at 10 a.m. Monday in Sacred Heart Church, Medford Hillside, for Francis B. Greclish, founder of the New England Assn. of Independent Tire Dealers. He died Wednesday in Kenoza Nursing Home here after a long illness. He was 77.

Feb 6, 1982. p. 1
Boston Daily Globe
(indicating that Sacred Heart Church, which was on Winthrop Street, is in Medford Hillside)

Notes:

The bulk of the newspaper clippings were from ProQuest searches conducted through the Boston Public Library. The searches variously included The Boston Globe and The Boston Herald plus other Massachusetts newspapers. Nearly 800 articles were culled down to thirty-seven that mentioned other streets in the neighborhood. They comprised news articles, real estate transaction records, obituaries, wedding announcements, public process announcements and classified advertisements. The following streets were mentioned:

Number of mentions	Street Name	Notes
7	Winthrop Street	
4	Quincy Street	North of Winthrop Street, closer to North Street
4	Capen Street	North of Winthrop Street
2	Emery Street	North of Winthrop Street
2	Marshall Street	North of Winthrop Street
2	Orchard Street	North of Winthrop Street
2	Boston Avenue	Both addresses north of Winthrop Street
2	Mason Street	North of Winthrop Street
2	Fairmount Street	Closer to Winthrop Street than College Avenue
2	Tesla Avenue	North of Winthrop Street
1	Hillsdale Road	North of Winthrop Street
1	North Street	North of Winthrop Street
1	Harris Road	North of North Street
1	Taylor Street	North of Winthrop Street
1	Sharon Street	North of North Street
1	Greenleaf Avenue	At the corner of Winthrop Street
1	Brookings Street	South of Winthrop Street
1	Hume Avenue	South of Winthrop Street
1	College Avenue	South of Winthrop Street

East Cambridge
EGPT
Planning Team

Emailed
FAXED

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JAN 8 2010
MEPA

January 7, 2010

Mr. Ian Bowles
Secretary of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114
Attention: Holly Johnson, MEPA Analyst

RE: EEA #13886

Dear Ms Johnson:

O-010-001 The Executive Board of the East Cambridge Planning Team, which represents residents of the Cambridge neighborhood most affected by the move of the Lechmere T station across Msgr. O'Brien Highway, would like to express its support for locating the Maintenance Yard at Option L, rather than any nearer to residential areas in either Cambridge or Somerville. A great deal of development is planned for the Northpoint area, which we would not like to see compromised in any way. O f course, our preference would be to have the maintenance yard and storage facility located at one end of the line or the other, rather than in the middle.

O-010-002 The move of the Lechmere station across a major highway is of particular concern to riders of the Green Line. As designed, the new station seems neither safely accessible without considerable traffic calming, nor a sheltered, pleasant place to wait for a train. All of the other new stations have walls, roofs, etc., and the Charlie Card dispensers are not out on the platform exposed to the elements. This design for Lechmere Station should be revised.

O-010-003 The East Cambridge Planning Team has proposed a use for the old Lechmere T station and property which has been enthusiastically supported by Cambridge City staff and others, and we hope you will consider it as well when making your decisions regarding this area.

With all good wishes,

Barbara Broussard
President, East Cambridge Planning Team
All other eight Board Members

East End House, 105 Spring Street, Cambridge, MA 02141

O-010-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

O-010-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

O-010-003

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

Johnson, Holly (EEA)

From: John Howe [john.b.howe@juno.com]
Sent: Friday, January 08, 2010 1:53 PM
To: Johnson, Holly S (ENV)
Subject: Comments: Green Line Extension Draft EIR (EEA #13886) -- Friends of the Belmont Community Path

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us) 100 Cambridge Street, Suite 900 Boston, MA 02114
RE: Green Line Extension Draft EIR (EEA #13885)

Dear Secretary Bowles,

We are writing on behalf of the Friends of the Belmont Community Path (BCP) to express our full support for comments you have received in this docket regarding construction of the Somerville Community Path. Our organization is a grassroots group of local citizens who support the construction of a planned 0.85-mile segment of the Mass Central Rail Trail that would connect Belmont Center to Brighton Street, Belmont.

There are important interdependencies between the Belmont Community Path and the Somerville Community Path, which are both part of the larger Mass Central Rail Trail. Ultimately, the goal of the Mass Central Rail Trail coalition (www.masscentralrailtrail.org) is to complete a 104-mile bicycle and pedestrian park through 24 communities from Northampton to Boston along the route of the former Central Mass Railroad. This cross-State park will become a major tourist attraction and 25 miles are already complete, including in Belmont, Cambridge and Somerville.

We take an interest in the Somerville Community Path because the segments of the MCRT are as interdependent as links in a chain, and the completion of segments outside our community will be of critical importance to the success and usability of the overall pathway network, including the Belmont segment. In this case, for example, the BCP would connect to a segment of approximately one mile, connecting to Alewife Station, that is slated for construction in the near future. From Alewife, there are connections to a broader network of off-road recreational paths including the Minuteman Bikeway and the Somerville Community Path. The successful completion of the Somerville Community Path would provide a key link in a safe, off-road path enabling bicyclists to commute between Belmont and Boston.

The critical eastern section of the Mass Central Rail Trail is the Somerville Community Path that will bring this linear park to Cambridge, the Charles River and into Boston. Clearly, the way to build this last section is with the construction of the Green Line extension from Cambridge to Somerville and Medford.

We join with other advocates for the MCRT project in offering wholehearted support for the design and construction of the Green Line extension but offer the following comments to insure successful extensions of both the Green Line and the Somerville Community Path.

O-011-001

The DEIR should clearly state that the extension of the Community Path will be designed y MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT. We understand that this design will be for the section from Lowell St. to Lechmere.

1

O-011-001

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-011-001

- The only way the Path can realistically and cost effectively be constructed is together with the Green Line construction. Therefore the Green Line and Community Path extensions will be designed and constructed as one project and described as such in the DEIR and Green Line planning documents.

- MassDOT should commit to working with the City and other State and Federal agencies to obtain the necessary funding for the construction of the Community Path extensions, including applying for Federal New Starts funding for applicable costs (The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop â€¦ may be eligible for FTA funding: http://edocket.access.gpo.gov/2009/E9-27240.htm)

There are many other reasons why these requests are reasonable and appropriate in addition to completing the Mass Central Rail Trail:

- The Somerville Community Path will provide desirable off-road bicycle and pedestrian access to the stations, offering superior connections to the neighborhoods (like in Davis Sq.), thereby attracting more riders in a very cost-effective manner.

- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is in integral part of the station access.

There are at least 2 precedents in the Boston area for community paths constructed and paid for by transit projects:

- The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project

- The Southwest Corridor Path alongside and over the Orange Line

Thank you very much for considering these comments for the extension of the Green Line relative to the Somerville Community Path.

Sincerely,

John B. Howe
Teresa Masterson-Howe
Co-Chairs
Friends of the Belmont Community Path

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rrPImayusPZBL4gAAJ1C7fbAqRVC76c1NEQrD3rFWAAYAAAAAAAAAAAAAAAAAAADNAAAAAAAAAAAAAAAAAAAXeAAAAAA=

friends of the Community path

112 Belmont #2, Somerville, MA 02143
www.pathfriends.org (617) 776 7769

To: Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

January 7, 2010

RECEIVED
JAN 8 2010
MEPA

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

O-012-001 I am writing on behalf of the Friends of the Community Path, a local community group with over 2,000 supporters of the existing and proposed Somerville Community Path. We strongly support the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville and believe in its positive economic and environmental impacts.

O-012-002 However, because of shortcomings and omissions in the design, we cannot support this Massachusetts Department of Transportation (MassDOT) Draft Environmental Impact Statement (DEIR) becoming the Final EIR, unless a Supplemental EIR or Addendum is performed to correct the deficiencies.

We urge you to:

1) Request that MassDOT incorporate the revisions outlined below into the EIR and the subsequent final design
2) Request that MassDOT seek state and federal funding for the Community Path extension as an integral part of the Green Line Extension
3) ensure that a Citizens Advisory Committee public process be instituted to help guide these necessary design improvements.

O-012-003

O-012-004

Although a 10% design stage cannot contain all the details everyone would like, now is the time to ensure that the Community Path extension is incorporated into the final EIR and the subsequent final design. Notably, the Community Path is good for the Green Line, and the Green Line is good for the Community Path. There are many local and national examples of

O-012-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-012-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-012-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-012-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

successful rail-and-path projects (a few are cited near the end of this letter), and now is the right time to garner state and federal funding for such projects.

The Somerville Community Path (also known regionally as an extension of the Minuteman Trail) provides the logical connection to the City's neighbors to the east and west. Every improvement to the Community Path extension in its co-design with the Green Line extension maximizes the potential of our regional transportation resources.

We appreciate your consideration of these revisions to both the EIR and the subsequent final design:

REVISIONS TO FUNDING AND CONSTRUCTION (followed by details):

O-012-005

- The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors *as agreed to in a February 24, 2009 letter from the EOT.*
- That to take full advantage of cost efficiencies and technical necessities, *the Green Line and Community Path extensions will be funded and constructed together as a single project and must clearly be described as such by MassDOT.*
- MassDOT should commit to work with the City of Somerville and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as an integral part of the Green Line extensions - as was done with Boston's 4.7mile long Southwest Corridor path as part of the Orange Line, and with the mile-long Linear Park as part of the Red Line from Davis Square to Alewife. (By comparison, the Community Path extension is about 2.5 miles.) Applications for funding should include Federal New Starts funding for allowed bicycle and pedestrian access costs
- *As the location of the support facility is finalized, the route of the Community Path from Washington St. to Lechmere in Cambridge should be re-evaluated.*

Details

Funding and the Importance of the Community Path extension – By acquiring federal funding for the Community Path in conjunction with the Green Line extension, both transit projects will benefit tremendously, with the added perk of creating additional design and construction jobs in the Commonwealth. By contrast, if funding for both transit projects is not sought concurrently, it will cost many times more to construct the Community Path as a separate project, in turn yielding the grim possibility that the Community Path extension may never get built. We understand that the City of Somerville has about $3 million of the reportedly $15 - $20 million Community Path extension estimated cost.

The request for State and Federal transit funding is reasonable and appropriate, as follows:

- The Federal Transportation Act (FTA) has recently proposed a policy that "pedestrian improvements located within 1/2 mile and all bicycle improvements located 3 miles of a

O-012-005

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

public transportation stop … may be eligible for FTA funding"
http://edocket.access.gpo.gov/2009/E9-27240.htm

- The Community Path - a mere 2 miles from Boston at it's current Cedar Street terminus - will provide desirable off-road bicycle and pedestrian access to the T stations, offering superior connections to the surround neighborhoods, especially in East Somerville - as in Davis Square, where 60% of the residents use public transportation and thousands walk and bike to the station each day. *The Community Path will attract more T-riders in a very cost-effective manner. More T-riders means enhanced opportunities for getting federal New Starts and other federal funding.*
- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is designed as an integral part of the station access. This will allow the public transportation success of the Davis Square station to be repeated in parts of Somerville that really need it.

REVISIONS TO DESIGN

Community Path from Lowell St. to Route 16: The MEPA certificate said that the environmental review would include evaluation of continuing the Community Path west of the Lowell St. station to Medford. The study results that were presented (Appendix E of the DEIR) concluded that the width of certain sections right-of-way was insufficient to provide such a continuous Path. However, since there are some sections where there is enough width, a route, path connections to local streets, can be studied further.

O-012-006

Community Path from Route 16 to West Medford: Section 3.2.3 of the RFP said that Vanasse Hangen Brustlin, Inc. (MassDOT / EOT's consultant) should study "*Using the bikeway/pathway guidelines, consider options for providing pedestrian connections to the West Medford commuter rail station and evaluate the viability and potential impacts of including a community path in this section of the project area.*" This seems not to have been done but should be. Such a Path would make a transfer connection from Route 16 to West Medford. Therefore MassDOT should plan for a community path to connect the Route 16 terminus to West Medford via an overpass of Route 16, a bridge over the Mystic River and a route along the Lowell commuter rail tracks.

O-012-007

Access to Route 16 Station - The plans in the DEIR document do not show how Green Line riders will safely access the Route 16 station from Arlington and Medford and from the Alewife Brook paths that are being improved as part of a $3.6 million ARRA stimulus project. A multi-use path for pedestrians and bicyclists to the station should be included in the design from the Alewife paths to the station. Please request that MassDOT perform this design.

O-012-008

Community Path Route from Washington St. to Lechmere - the Somerville Community Path route should connect the Washington St./Brickbottom station, the Brickbottom community and Inner Belt to Lechmere. The present plans do not make these connections. If the proposed Yard 8 location for maintenance and storage facility is "dropped", better routes for the Community Path (such as along the Green Line to Brickbottom and over the former Red Bridge location) that do make these connections are possible. The Green Line extension plans should state that this re-evaluation will be done.

Page 3 of 6

O-012-006

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16 and related station access issues. Connections to West Medford and the existing commuter rail station can be specifically evaluated at that time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-012-007

Please see response to Comment O-012-006.

O-012-008

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the

Bicycle Parking

O-012-009

- The amount of bicycle parking presently described in the plans (270 spaces) is welcome but will be insufficient for the expected number of bicyclist coming to the stations. 270 spaces is only about 1% of the expected ridership. Based on the present parking at Red line stations, bike parking at 3-5% of ridership will soon be needed. Therefore, we request that the amount of bike parking be increased to approximately 5% at the Union Square, Route 16 and Lowell St. (major intersection with Community Path) stations and 3% at the remainder.
- Also, the location of the bicycle parking (where specifically shown in the plans) are good at some locations but not at others. The bicycle parking locations should be as close to as possible to the entrance and in well lit and safe locations.
- Lastly, bicycle parking should be covered parking if at possible.

O-012-010

Improved pedestrian and bicycle access

Pedestrian connections to some of the stations could be better designed. Access to some of the stations could be vastly improved by having *more than one entrance or access point* such as:

- a direct connection from the Gilman Square station to the Somerville High School/Library/City Hall complex)
- the Washington St. station design which seems particularly poor in this regard for riders coming from the west and north. This could be greatly improved by locating the station directly above Washington St. where direct access via elevator would be possible (earlier designs included such a layout).
- In general, pedestrian and bicycle access should be given higher priority in these "community-based" station designs that motor vehicles connections.
- station designs (specifically College Ave and also Washington St.), where drop-off stops ("kiss and ride"), directly blocks the front of the T-station entrance and will congest entrance to the station. Paradoxically, pedestrian access to the station entails a long, complicated route.
- Lowell St. station, where a direct connection to the platform from the Path coming from Cedar St. would be possible via a safe pedestrian crossing of one track. MassDOT has said this would not be allowed because of safety concerns even though every light rail system in the US (including in Boston: Longwood stop on the Green Line and Milton and Butler stops on the Mattapan line) allows crossing of tracks for access. Even if MassDOT will not allow this access point at this time, the Lowell St. station platform should be designed for such future access.

Page 4 of 6

Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-012-009

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-012-010

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

We look forward to seeing these revisions incorporated into the EIR and the subsequent final design.

Here are just a few local and national precedents for successful rail-with path projects:

PRECEDENTS FOR RAIL-WITH-PATH PROJECTS

There are at least two precedents in the Boston area for rail transit with community paths with both constructed by MBTA and funded with state and federal funding:

- The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
- The Southwest Corridor Path in Boston alongside and over the Orange Line

Additionally, there are many recent examples of paths being built together with mass transit expansions around the nation:

- The Capital Crescent trail alongside the planned light-rail Purple Line in suburban Washington DC includes trail construction is part of the project and the cost estimates that will be submitted for New Starts funding from the federal government.

  http://purplelinemd.com/images/stories/purpleline_documents/deis/deis/10_chapter5.pdf
  http://purplelinemd.com/images/stories/purpleline_documents/deis/Conceptual%20Plans_%2009%202008.pdf

- Bicycle and pedestrian path alongside the light-rail Expo line in Los Angeles:
  http://buildexpo.org/gallery.php
  http://metro.net/projects_programs/exposition/feis.htm

- A world-class bikeway was built alongside and integrated with stations on the 14-mile Orange Line BRT corridor in LA:

  http://www.streetfilms.org/las-orange-line-bus-rapid-transit-plus-bike-path/

The Somerville Community Path is a critical piece of the following regional and State-wide bicycle and greenway plans.

- The Massachusetts Bicycle Transportation Plan (page 30 and 45 and Figure 4): http://www.massbikeplan.org/_docs/Massachusetts%20Bicycle%20Plan%20with%20Links%20to%20Graphics.pdf
- The Somerville Community Path as part of the critical 104-mile east-west Mass Central Rail Trail (Figures 4.1 and 4.2): http://www.masscentralrailtrail.org/
- The City of Somerville's Open Space and Recreation plans list the Community Path
- The Mystic Valley Case Statement for Active Transportation for the Mystic River Communities:

http://www.railstotrails.org/resources/documents/whatwedo/case_statements/Vision%20for%20July%2010th%20draft.pdf

- The 2007 MAPC Regional Bicycle Plan - http://www.mapc.org/transportation/trans_alternatives/Bike_plan_PDFs/Bike_Plan_FINAL_version_3-14-07.pdf

In summary, we encourage you to: *1)* request that MassDOT incorporate these revisions into the EIR and the subsequent final design, 2) request that MassDOT seek federal funding for the Community Path extension as an integral part of the Green Line Extension, and 3) ensure that Citizens a Advisory Committee public process be instituted to help guide these necessary design improvements. These crucial revisions relating to the Community Path as it is co-designed with the Green Line extension will help bring our regional transportation resources closer to their full potential.

Thank you.

Sincerely,

Joel Bennett
President and Founder
Friends of the Community Path

Glass Factory Condominium Trust
169 Monsignor O'Brien Highway
Cambridge, MA 02141

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January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us

Secretary Bowles,

The Glass Factory Condominium Trust would like to submit this independently commissioned critique performed by Cavanaugh Tocci Associates regarding the sound and vibration analyses presented in the Draft Environmental Impact Report and MBTA Green Line Extension, Noise and Vibration Technical Report. It is clear from this analysis that these two reports are severely lacking in multiple areas, which are summarized below.

O-013-001

1) Although the DEIR provides a recommendation for a maximum of 65 dBA for interior train pass-by sound levels, actual measurements or data are not presented in the report. Interior noise is probably the most important issue facing a building that is situated next to transit lines, and yet the report fails to address this critical aspect. The Glass Factory respectfully requests that the MBTA commission work to assess interior train pass-by sound levels before making any decisions regarding mediation.

O-013-002

2) Neither report reveals the assumptions made in estimating sound levels from passing trains, specifically whether an elevated track structure was taken into consideration. An elevated track structure will produce more noise than tracks along the ground and this would add to the noise impact being experienced by residents at the Glass Factory. The Glass Factory respectfully requests that the MBTA disclose whether sound estimates were based on ground-level tracks or elevated tracks in the DEIR, and if it was the former, that the impact assessments be re-run with the elevated track configuration assumption.

O-013-003

3) The DEIR does not specifically address remediation approaches for sound mitigation at the Glass Factory. This is an unacceptable gap that needs to be addressed specifically, especially given the fact that the Glass Factory was assigned the most severe impact from a noise perspective and that the DEIR has

O-013-001

The outdoor-to-indoor noise level reduction of the existing Glass Factory building façade has been measured and future projected interior noise levels have been assessed against appropriate criteria. These findings have been reported in FEIR Chapter 5, *Lechmere Station*. Mitigation commitments are reported in FEIR Chapter 8, *Draft Section 61 Findings and Mitigation Commitments*. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-013-002

The presence of an elevated track was taken into account in projecting noise levels at adjacent abutters, such as the Glass Factory Condominiums. In accordance with FTA guidelines, an increase in noise of four decibels was included in projecting noise levels. This increase is due to the potential for noise to be radiated from the vibration of the elevated structure. Reference noise measurements of the Green Line trains operating on the existing elevated guideway south of the existing Lechmere Station confirm that this four decibel increase is appropriate for the existing guideway. FEIR Section 5.4 includes updated noise and vibration modeling assumptions for the vicinity of the Glass Factory Condominiums.

O-013-003

As reported in FEIR Section 5.4, the existing outdoor-to-indoor noise reduction of the Glass Factory Condominiums has been measured and the resulting interior noise level projections have been assessed against appropriate interior noise criteria and mitigation has been discussed in Chapter 5, Lechmere Station. Proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation.

Glass Factory Condominium Trust
169 Monsignor O'Brien Highway
Cambridge, MA 02141

O-013-003

already deemed the Glass Factory location unsuitable for a wall. The Glass Factory respectfully requests that more specific sound mitigation methods are both proposed and budgeted for the Glass Factory in the DEIR.

O-013-004

4) Despite the Glass Factory and Brickbottom having similar proximity to an elevated track, no vibration impact is projected for the Glass Factory. Cavanaugh & Tocci clearly believe that based on the available data, vibration impacts on Glass Factory due to the Greenline Extension would be unacceptable. The Glass Factory Condominium Trust respectfully requests that a vibration impact analysis be conducted or re-run with special consideration for the Glass Factory Condominium.

We appreciate the opportunity to comment on the DEIR and re-affirm our requests for more clarification and analysis specifically with regard to the Glass Factory Condominium due to its close proximity to the proposed Greenline Extension.

Thank you for your consideration.

Regards,

Trustees of the Glass Factory Condominium Trust
Eric Huang
Elaine Krohn
Derek Lombard
Christopher Park
Ippei Takahashi

Enc. Analysis from Cavanaugh & Tocci Associates, Inc.

O-013-004

Potential vibration impact prior to mitigation has been assessed for all sensitive receptors including the Glass Factory Condominiums. Unlike the Brickbottom Artists Building which is approximately 18 feet away from the proposed elevated guideway, the Glass Factory Condominium building is approximately 43 feet away from the proposed elevated guideway at its closest point. Trains will be traveling at a lower speed than near the Brickbottom Artists Building as they approach and depart the new Lechmere Station. Chapter 5 (Lechmere Station) and Chapter 8 of the FEIR describes the process for developing and implementing mitigation measures at the Glass Factory Condominiums.

CAVANAUGH TOCCI ASSOCIATES, INCORPORATED

327 F BOSTON POST ROAD, SUDBURY, MA 01776-3027 TEL: (978) 443-7871 FAX: (978) 443-7873 E-MAIL: cta@cavtocci.com

SENIOR PRINCIPALS
WILLIAM J. CAVANAUGH, *FASA, Emeritus*
GREGORY C. TOCCI, *PE, FASA, PRESIDENT*

PRINCIPALS
DOUGLAS H. BELL
LINCOLN B. BERRY
TIMOTHY J. FOULKES, *FASA, INCE, Bd. Cert.*
MATTHEW J. MOORE, *CTS*

ADMINISTRATOR
DONNA L. RAFUS

SENIOR AND STAFF CONSULTANTS
ALEXANDER G. BAGNALL
ANDREW C. CARBALLEIRA
WILLIAM J. ELLIOT, *LEED AP*
AARON M. FARBO, *LEED AP*
JOHN T. FOULKES
MARK V. GIGLIO
BRION G. KONING
MICHAEL D. MAYNARD, *CTS*
CHRISTOPHER A. STORCH

MARKETING MANAGER
PATRICIA A. CASASANTO

ASSOCIATED CONSULTANTS
NICHOLAS BROWSE, *SMPTE*
STEWART RANDALL, *CTS-D*
MARTIN CALVERLEY, *CTS*

January 8, 2010

Glass Factory Condominium Trust
c/o Messrs. Eric Huang and Jonathan Donahue
169 Msgr. O'Brien Highway
Cambridge, MA 02141

Subject: Review of MBTA Green Line/Lechmere Extension
Review of Sound and Vibration Impacts
Glass Factory Condominiums

Dear Messrs. Huang and Donahue,

As requested, we have reviewed documents concerning sound and vibration impact of proposed alternatives for the Green Line Lechmere Extension to Somerville/Medford. All alternatives involve the same elevated rail alignment proposed to be adjacent to the Glass Factory building. The following are documents reviewed concerning the project:

MBTA Green Line Extension, Noise and Vibration Technical Report DEIR (HMMH Report Number 302580.000 dated August 2009) posted to the MBTA Green Line Extension website on December 24, 2009.

Draft Environmental Impact Report/Environmental Assessment and Section 4(f) Statement, Green Line Extension Project, Volume 1, Chapter 4 Affected Environment and Chapter 5 Environmental Consequences, dated October 2009 and posted to the MBTA Green Line Extension website on October 16, 2009.

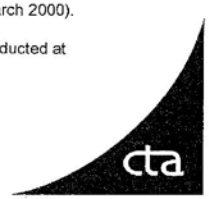
Various other figures and information on the Green Line website.

Transit Noise and Vibration Impact Assessment, Federal Transit Administration, Report FTA-VA-90-1003-06 May 2006.

In addition, we have reviewed information for the MBTA Greenbush Commuter Rail Line. This other MBTA project is not related to the Green Line Extension project; however, methods used to predict sound and vibration impacts along the Greenbush Line are similar to those used to predict impacts along the Green Line Extension. The Greenbush information has the advantage of comparing sound and vibration impacts predicted prior to construction and measured after the Greenbush Line began revenue service. Among reports reviewed for the Greenbush Line are the following:

Draft FEIR dated March 2000 for the MBTA Greenbush Line Corridor (FEIR, March 2000).

HMMH project memo dated April 21, 2000 outlining noise measurements to conducted at Glastonbury Abbey (HMMH April 2000).



HMMH project memo dated May 16, 2000 indicating monitors to be located in spaces of Glastonbury Abbey for our comment (HMMH May 2000).

MBTA Greenbush Commuter Rail Line, Operational Noise and Vibration Measurement Results-Draft, February 2009, KM Chng Environmental Inc. DRAFT REPORT

Summary Chart of Sound Measurements Conducted March 10, 2008 by Cavanaugh Tocci Associates, Inc. (not prepared for written report).

We also visited the Glass Factory for purposes of examining the windows to investigate the potential for upgrading them or replacing them to provide the required noise reduction to maintain pass-by sound levels to within 65 dBA as recommended in the DEIR (page 45). During the visit, I also inspected the two garage levels for evidence of foundation settling and foundation walls cracking.

Sound Impacts

DEIR Determination

The DEIR estimates day-night average sound levels (L_{dn}) at the Glass Factory façade of 70.2 dB. A severe impact in accordance with FTA guidelines was determined to be a day-night average sound level exceeding 63.5 dB, thus they have determined that a severe impact will occur at the Glass Factory, and that sound barriers will not be effective in mitigating sound levels at upper stories overlooking any barrier constructed. In estimating sound levels, it was not indicated whether or how sound radiated from the proposed elevated structure was considered in the estimated sound level.

Additional Noise Impact Considerations Required

The DEIR does not indicate what maximum sound levels will occur outside and inside the building. Anticipated to be of most significance are maximum train pass-by sound levels inside the building; however, there is a small outdoor garden area worthy of consideration as well. The building is outfitted with tandem horizontal slider windows, each set glazed with single pane glass. The DEIR recommends that train pass-by sound levels not exceed 65 dBA inside residential units. They suggest that airport noise control programs typically obtain 5-10 dBA reductions through window improvements; however, no mention was made as to what improvements in Glass Factory windows would be required.

Existing Windows and the Potential for Improving Them

The tandem window glass spacing between sashes is approximately 2.25". The interior and exterior frames appear to be connected. Exterior and interior sash seals, though appearing to be thin, also appear subjectively to be in good condition providing a fair to good window seal.

The DEIR did not evaluate building façade sound isolation. The existing isolation appears to be appropriate for the high levels of traffic noise exposure on the west side. The same tandem window arrangement is used on both sides of the building. Despite the good sound isolation provided by the existing windows, enhancement or replacement with higher performing windows would be required to maintain maximum train pass-by sound levels to 65 dBA. The sound isolation enhancement normally implemented with existing windows is to space an interior sash of compatible operability on the interior, spacing it 3 to 6 inches from the prime glazing. In the case of the Glass Factory, this would be a third operable sash and would probably not be practical from the standpoint of a unit owner. Hence, the existing tandem windows would likely need to be replaced by acoustical windows having the required sound isolation performance.

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Accuracy of Estimated Sound Levels

In order to evaluate the accuracy of estimated sound levels, we considered DEIR estimates of sound levels produced by commuter trains on the MBTA Greenbush Line at a wayside location. Commuter train sound levels and their frequency spectra differ from those of Green Line trains, however the methods employed to evaluate pass-by sound levels is similar. For the one abutter for whom we conducted commuter rail pass-by sound measurements, actual measured sound levels ranged between 5 and 11 dBA higher (averaging 7 to 8 dBA higher) than estimated during the DEIR phase. In a wider evaluation of operational sound levels by KM Chng Environmental, Inc. (Draft report dated February 2009), much better agreement was found between predicted and measured train pass-by sound levels. They determined that DEIR estimated sound levels were within 1 to 2 dBA of actual measured sound levels with one location having measured sound levels only 3 dBA higher than estimated during the DEIR phase.

Conclusions

The following are concluded regarding sound impacts:

1. A severe exterior noise impact is anticipated. Noise barriers will not reduce sound levels at upper stories of the Glass Factory exterior façade.
2. DEIR estimated sound levels are expected to be acceptably accurate, although in our previous work for an abutter along the Greenbush Line, DEIR estimates of future train pass-by sound were lower than later measured.
3. The DEIR recommends that interior train pass-by sound levels not exceed a maximum of 65 dBA. Interior sound levels were not addressed in the DEIR.
4. The DEIR does not explore specific remediation measures to limit train pass-by sound levels inside the Glass Factory building. The existing windows may need to be replaced by acoustical windows that provide a larger noise reduction.
5. The added impact of sound radiated from the elevated track structure is not discussed, and having not been considered, may result in sound levels higher than estimated in the DEIR.
6. Other train pass-by mitigation methods such as covering the elevated structure or tunneling were not discussed.

Vibration Impacts

DEIR Determination

Unlike sound impacts, vibration impacts at the Glass Factory building are not directly addressed or stated. However, vibration levels at Brickbottom Lofts are estimated to be about 77 dBA exceeding the applicable criterion of 72 VdB resulting in a vibration impact requiring consideration of mitigation. Note that the track adjacent to Brickbottom Lofts is also to be elevated, though elevated structures adjacent to the Glass Factory and Brickbottom Lofts were not described or noted as being equivalent in design.

Criteria

The criteria recommended for use by the FTA do not require vibration levels to be below the "threshold of feelable" vibration as described in *ANSI S2.71 Guide to the Evaluation of Human Exposure to Vibration in*

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Buildings. The perceptibility of vibration in building depends on building structural response characteristics. With the alignment being so close to the building, special evaluation of building response to train pass-by vibration should be given. This is especially required owing to the variability in vibration level prediction noted in transfer mobility measurements conducted. This further evaluation might begin as simply measuring vibration in a similarly constructed building adjacent to a similarly supported track structure.

Visual Inspection Lower and Upper Garage Levels

On the upper garage floor, some cracking was noted, but in only one case was the crack raised one side. This crack transmitted into the adjacent wall and up a short distance. On the lower garage floor, presumed to have the original concrete at-grade floor, only very minor cracking was noted. However, the west side wall (side of the building away from the proposed rail alignment) showed minor cracking and water leakage at the center of most structural bays. As the grade level is lower on the east side of the building, little cracking and water leakage was observed. Though it is not this firm's expertise, during design, attention should be made in the design of elevated structure footings not to unduly increase ground loads on walls that could result in cracking and water leakage.

Accuracy of Estimated Vibration Levels

The DEIR discusses a comprehensive vibration propagation technique applicable to grade-mounted track. The transfer mobility data exhibited about a 10 VdB variation from one location to another where this testing was performed. This variation suggests that estimated vibration levels might vary by +/- 5 VdB.

In the KM Chng draft report comparing measured and predicted sound and vibration levels along the MBTA Greenbush Line, measured vibration levels were noted to be higher and lower than predicted by 12 to 14 VdB.

Conclusions

The following are concluded regarding vibration impacts:

1. Green Line Extension train pass-by vibration has not been evaluated at the Glass Factory, but on the basis of information provided for Brickbottom Lofts, vibration impact at the Glass Factory is expected to be unacceptable.

2. Estimated vibration levels can vary from location to location because of variations in ground propagation characteristics. This variation may be somewhat larger than garnered from transfer mobility measurements on the basis of a comparison between predicted and actual vibration measurements along the MBTA Greenbush Line.

3. Special consideration of Green Line Extension vibration transmitted to Glass Factory should be considered because of its close proximity to the proposed alignment.

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If we can provide any further information, please do not hesitate to contact us. Thank you.

Yours sincerely,
CAVANAUGH TOCCI ASSOCIATES, INC.

Gregory C. Tocci

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PUBLIC COMMENTS ON THE

DRAFT ENVIRONMENTAL IMPACT REVIEW
GREEN LINE EXTENSION PROJECT
EEA NUMBER #13886

SUBMITTED BY

Green Line Advisory Group for Medford (GLAM)
c/o 25 Bussell Road
Medford, Mass. 02155

SUBMITTED TO

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA Number #13886
100 Cambridge Street
Suite 900
Boston, Mass. 02114

With copies to:

Katherine Fichter
Executive Office of Transportation
Office of Transportation Planning
Room 4150
Ten Park Plaza
Boston, Mass. 02116

and

The Honorable Mayor Michael McGlynn
And
The Medford City Council
85 George P. Hassett Drive
Medford, Mass. 02155

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Overview:

The Green Line Advisory Group for Medford, better known in the City of Medford as GLAM, is a grassroots group consisting of members of the disability and environmental justice community along with abutters and other concerned citizens whose mission is the education of the Medford public about the proposed Green Line project. We are providing public comments within the time frame allowed on the DEIR on the EEA # 13886 regarding the proposed Green Line Extension.

When speaking about the proposed Green Line Extension, the Commonwealth of Massachusetts and the special interest advocacy groups need to get real. The DEIR submitted by the Executive Office of Transportation (EOT- now known as MassDOT) to the Executive Office of Energy and Environmental Affairs (EOEEA) from our perspective is riddled with abstract theory. We will continue to call MassDOT EOT for the purpose of clarification as it was known during the process of this period.

The DEIR makes ambiguous statements with vague conclusions versus presenting practical application on the reality of the true impacts of this project that are both short term and far reaching. Some of these ambiguous statements and conclusions often contradict themselves in other parts of the DEIR. While stating they are looking at other maintenance sites, they recommend the Yard Eight location as their recommendation. While EOT states they don't plan a 300 car parking garage at Route 16 MVP, they encourage a garage at Route 16 MVP. The DEIR is like an open ended environmental contract whereas citizens' voices and concerns are not being heard.

The DEIR is a document based more in political expediency and public relations hype by the EOT and special interest advocacy groups than based in the stark realities of our times. As our environmental advisor, Dr. Marlene Warner,[1] points out to us in her review of EOT's past studies, the use of numbers, lots of numbers within EOT studies have a ". . . striking absence of meaning, which is statistics applied to those numbers in a relevant way . . . "The public should expect to see statistics that represent processed data with degrees of probable outcomes before planning or speculating. The question, is this project the best the state can do for its citizens? We think not, which is why we will be

[1] Dr. Warner is a retired professor of Cell Biology and Obstetrics/ Gynecology and Interdisciplinary studies. Dr. Warner is a former Dean of Baylor College and also has taught at Union Institute in Cincinnati. She has served on the Houston Galveston Area Council, a 17-member county planning commission for over ten years. In particular she serves on the Environmental Health committee and its Air Quality subdivision. Her background and interest is in health as a faculty member of both the Cell Biology and Obstetrics/Gynecology Departments and in research in the Realties of Cancer in Minority Communities, and chemical and environmental basis for cancer causation. She was the first woman to participate with NASA in putting a biological project in space.

recommending that the state break this project down into further phases with additional study needed.

This transit project's vision is limited in imagination with proposals, regulations and environmental standards that will likely be outdated by the time this project is even ready for construction. On November 17, 2009 it was announced that President Barack Obama is pushing to impact federal safety controls on state transit. (Metro Newspaper, "Will Obama set riders at ease?") What does this mean to backlogged maintenance issues that the MBTA is currently experiencing?

As another example, The Mount Sinai School of Medicine recently announced in its November 2009 newsletter Focus on Healthy Aging in its News Briefs column:

"Carbon monoxide in air pollution, even at levels well below national standards, is associated with an increased risk of emergency hospitalizations for cardiovascular disease in older adults, according to a study published September 15 in Circulation . . . Currently the EPA is evaluating the scientific evidence on the link between carbon monoxide and health to determine whether the health-based standard should be modified."

There is mounting research evidence we can site concerning the negative impact of diesel particulates on health. There have been numerous public comments requesting a health study to determine the impact of moving diesel commuter trains closer to local residential homes. This is especially true when pinpointing the impact on the disability and environmental justice populations living in the HUD elderly housing program known as Walkling Court in Medford. EOEEA will find no such study in the DEIR. In fact, we have written responses from EOT playing the coy game that they are only responsible for the proposed Green Line Extension, not the impact of the commuter rail. This is like a bank robber telling you they are only responsible for the intent of stealing money from the bank while any collateral damage is not their responsibility. Let' get real.

The proposed Green Line extension project is not based in the financial realities of today. Day after day we are confronted with news articles and reports concerning the MBTA's high operating deficit, public safety issues that put the public at risk due to deferred maintenance, compounded by mounting debt service. Despite these issues, EOT is recommending that the MBTA take on expansion of its operation and maintenance by extending the proposed Green Line. This expansion does not fly in the face of fundamental financial common sense.

In an August 16, 2009 editorial called "On the slow train to financial reality" even the Boston Globe speaks to the need for restraint in expanding projects that further burden the MBTA under its current weight of issues. The Globe rightfully asks the question about the proposed Green Line, ". . . Are there cheaper ways

to achieve the same transportation and environmental goals?" As we know, the Commonwealth is allowed under the federally approved State Implementation Plan to propose substitutions that provide equal or better environmental benefits. In speaking about the proposed Green Line Extension and financial realities, the Globe states in the same editorial ". . . that project must be scrutinized more closely for affordability." We believe that the EOT should add within the DEIR an alternative choice that addresses a substitution for the proposed Green Line that would address financial practicalities while achieving the same transportation and environmental goals.

In the same train of thought, the November 2009 MBTA report commissioned by Governor Deval Patrick on a review of the MBTA's conditions recommends, "It makes little sense to continue expanding the system when the MBTA cannot maintain the existing one. Slow expansion until the safety and maintenance priorities can be addressed."

As many citizens recently have learned through unfortunate circumstances, you cannot continue to pile up debt or defer debt you cannot afford. At some point you have to pay the piper so to speak. There are negative consequences to this lack of common sense or delusional approach by the state, especially when we are putting the transit public in unsafe and at risk detriment. This public safety issue is a concrete issue as many learned who rode the Red Line a few weeks ago.

In the Boston Globe on Saturday, November 14, 2009, on page A6 in an article entitled "Obama pushes domestic spending cuts" this article articulates the fact that the Obama administration is shifting gears to address mounting debt by freezing or reducing domestic spending in the upcoming federal budget. This action is being taken in the face of mounting public anxiety over growing deficits that have become both an economic and political liability.

Two days before in the Boston Globe on the opinion page in the article, "Red ink is staining more than the MBTA," a public policy and advocacy firm points out that the Commonwealth of Massachusetts isn't much better off than the MBTA when it comes to incurring debt. This year taxpayers will be paying $1.8 billion in debt service while needed social services and other public services endure the brunt of cuts. The article points out the need for citizens to make the hard choices for what we want to pay. Cut needed services or pay higher taxes?

EOT has decided within the DEIR to impose that choice for Medford by recommending a phase II alternative that eliminates close to $300k in assessed property tax value according to the assessor records of Medford by taking down commercial property between North Street and Route 16 MVP. GLAM contests EOT's figures in the DEIR that are based on estimates as opposed to the actual

numbers at the assessor's office. [2] This phase II adds $160 million in construction costs to this project and would lose Medford revenue that we estimate is equivalent to 9-10 police, fire fighter or teachers jobs lost. How did EOT arrive at that decision for Medford? Why wasn't the city of Medford involved in that decision?

What is their answer to that tax loss? The hypothetical potential of urban development, assuming that Medford the lowest density of the three cities wants to become a high-density location. The oxymoron of the proposed Green Line extension, developing transit to deal with high-density impacts while creating more high density impacts.

As the Globe opinion columns above so aptly states and we quote, "Of course, hard choices run directly counter to the political process. Few leaders get elected by telling voters they can't have what they want . . . The result is a culture of immediate gratification – photo opportunities and ribbon cuttings, while debt piles up and maintenance is deferred."

We believe that it is time that the State Representatives and State Senators, along with EOT officials who have pushed the Green Line project, get out from under the above- mentioned political hackery trend and get real. Here are facts they need to confront:

No money for this project for several years: More objective sources at the State House inform us that funding for the first phase of this project will not be available until the year 2016 due to recession conditions. Before we move to a new endeavor, we must address a plan for the financial and public safety issues at the MBTA. It is projected in the recent MBTA D'Alessandro report that by 2014 the MBTA without additional sales tax revenue will be at a $1.19 billion cumulative deficit. We must deal head on with this problem and make hard decisions before we set the proposed Green Line Extension in play. Otherwise we doom the MBTA to failure in being able to afford or maintain an expansion project as currently proposed by the EOT.

Therefore there is time to ensure that this project's environmental and socioeconomic benefits are articulated in a more concrete fashion that proves out hypotheticals now proposed and addresses residents' and community concerns. Federal funding for the Route 16 MVP phase of this project may not occur until 2020, if at all, due to scarcity of available funds. By that time, there may be other progressive techniques available that would make this current plan moot.

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2 In our research at the Medford Assessor's office, it was found that the 200 Boston Avenue property was assessed at $13,016,400. At a commercial tax rate of $20.36 per thousand, the property tax on this commercial building alone represents $265,000. This figure does not include the Elizabeth Grady building proposed to be taken as listed in the DEIR.

This means the state needs to bite the bullet and be honest with special interest groups, such as the Conservation Law Foundation (CLF), that this project has to be scaled down and slowed down to allow the MBTA to address critical public safety issues. We all ready know of civil rights violations within seventeen years of this process where there has been no participation by the disability or environmental justice community from Medford. This has been documented in a civil rights complaint/report to the FTA. We are all ready aware that the FTA and the federal environmental protection agency are studying particulates to likely recommend a change to standards since there is a great deal of evidence regarding the negative health effects of these particulates. (See mitigation comments for reference to these studies in this paper.) And if the CLF refuses to listen, the state needs to take their case back into the courts based upon extraordinary financial burden.

Immediate gratification without benefit of studies: Activists practice doctrine that emphasizes direct action in support or in opposition to one side of a controversial issue. Activists do not always mirror the desire of the grassroots community. If their activism is not based in heuristic research or what also is known as political ethnographic inquiry in understanding human conditions, they can create a polarization and anti-dialogical action within a community as has been seen in the case of the proposed Green Line Extension process with groups such as STEP and MGNA.

As the progressive educationalist, Paulo Freire, has stated in his book, "The Pedagogy of the Oppressed", the one last fundamental characteristic of anti-dialogical action is cultural invasion of a community. Activists, not based in authentic diverse grassroots understanding, become cultural invaders who create divisive tactics and manipulation for their own special interest and gratification. In this case pushing the theories of material gain based in highest and best use, the promise of increased property values, and high density urban development that can open communities to speculation and destabilization resulting in moving moderate to low income populations out. And because of their own special interest, advocates who use anti-dialogical action most times do not represent the will of their community. Activist groups, not based in the grassroots, often disrespect the potential of the community in which they invade and impose their own view upon a community, inhibiting the ability to bring consensus on an issue within the community. We believe this happened in the Green Line process in Medford. This cultural process is what educationalist Paulo Freire is articulating in his book.

We believe that EOT and the State Representative who represents the district impacted by the Green Line in Medford allowed special interest advocacy groups such as STEP and MGNA to have undue lobbying influence over the proposed Green Line process by the unlimited access they were provided. This process was supported by the unusual tactic of the CLF, a legal body that knew that the disability community was not being represented in this project. This tactic could

be construed as doing an end run around the Americans for Disabilities Act and we believe should be investigated as civil rights violations as we point out in our FTA case.

GLAM, a disability and environmental justice group, came together because of these issues with the belief these special interest groups misrepresented the diversity of our community. The EOT process has now put local neighborhoods such as Brickbottom in Somerville and Medford businesses and residents abutting this project in environmental harms way. This process became based in advocacy groups' own naiveté and elitist attitudes in understanding how citizens participation and the public choice theory works versus the mechanism theory in building community consensus. Therefore there became a collaborative process between the legislator and the special interest groups that drove the process to become less transparent and less objective resulting in the individual citizen's voice being shut out.

To show their arrogance with only 10% of studies being done, the CLF came out in favor of the project going to Route 16 MVP. When these 10% of studies came out and the numbers of TAZs were not providing the ridership numbers to justify this terminus, the CLF came out in support of unscientific literature that said 10,000 people would be riding at Route 16 MVP just because they lived within the surrounding area. Not only did EOT's modeling not bear this number out, but we brought studies forward from the CTPS that showed this theory was irresponsible and ridiculous in comparison to practical application which through traffic studies showed commuters driving to their jobs in the suburbs as opposed to downtown Boston.

When special interest groups like MGNA started to present station designs without evidence of disability access and then promoted them with EOT, we in GLAM felt this symbiotic relationship was going too far. In other words none of the stations were designed in a fashion that allowed full accessibility or was the disability community allowed to participate in those designs.

As Katherine Fichter, planner for EOT, stated in a recent Tufts Daily newspaper article on the proposed Green Line, the cost of the Green Line expansion increased because EOT was not fully complying with the ADA. GLAM had already brought these compliance issues out at an EOT public advisory meeting based upon information we received from sources at the MBTA. Our source informed GLAM that EOT was trying to cut the costs of this project by reducing ADA compliance since EOT had originally put forth bogus project cost numbers in their EENF. EOT did not feel the public would accept the full cost of this project. EOT denied our claim at the time. But the proof is in the pudding.

The current design for stations in the DEIR, which GLAM helped advocate for the disability community, shows how inept the special interest groups were in their designs. But the station design process also proved a pattern of excluding

authentic citizen participation. This was the same pattern GLAM encountered regarding shared community paths. We do appreciate that EOT actually has mentioned in the DEIR the ADA enhancements to community paths that are required by the FTA in the design process. These were the guidelines we provided to them at the Community Path workshops. We do expect MassDOT (EOT) to continue on designing stations. But we must wonder if the disability and environmental justice community will be left out of these designs as well, especially those who live in Medford. The DEIR process should recognize that a spokesperson for EOT stated in response to public comments on the SIP annual report that the disability community would have to wait decades for their rights. And the disability community felt that was the attitude EOT had. The DEIR process owes a responsibility to the disability community to ensure that the federal government is informed if the disabled and environmental justice community rights are violated.

As pointed out in the report called "Power and Interest Groups in City Politics", a report written by Tufts researchers for the Rappaport Institute for Greater Boston at Harvard University, the interests of the disability and environmental justice communities remain seriously under represented when it comes to government and that special interest groups tend to represent the more affluent and highly educated. Therefore, when EOT points out the negative impacts to the environmental justice population in Union Square area or leaves out mention of the mitigation impact to Walkling Court where the elderly disability and environmental populations reside, GLAM knows that these populations were left out of the EOT process. This claim is based upon our own experiences and observations. Hence, GLAM has filed a civil rights report/complaint to the FTA regarding what we saw as civil rights violations within the process.

Based upon the undue influence of special interests, the State Representative for this district took an advocacy position to support the proposed Green Line extension based upon theory without benefit of any studies. A supposedly, highly educated person who could not wait for studies before taking an advocacy position that did not necessarily represent the entire community. Therefore he now stands stark naked intellectually before the Medford community having advocated a project that incorporates residential and commercial land taking, the code name for eminent domain by the state, with the resulting impact of tax dollars projected to be lost to the city of Medford's tax base. And as we have recently seen in the Rivers Edge project, those faced with land acquisition are often low-balled in the process and have to go to court to fight for the rightful value of their property.

As businessman David D'Alessandro wrote in the MBTA review, plans and theories by state government and legislators are often". . . well intentioned, but founded upon a combination of optimistic, unrealistic and untested assumptions."

Hence we have a pattern with the proposed Green Line project. Promoted by the same state legislator, who listened to special interests that said there would be no land taking and who promoted station designs that did not meet the Americans with Disabilities Act requirements. Even now claims of better air quality are based in regional measurements while the DEIR admits on page 6-8 in the detail assessment of this project that we could see localized decreases or increases in carbon monoxide and particulate matter in our area. Hence, the fallacy of theory meets reality.

The DEIR is a contradiction in terms and we would conclude it is like buying a pig in a poke. EOT leaves open doors for inference of further mitigation issues upon the Medford community than currently articulated in the DEIR. Thus the DEIR should not become the final environmental report until these issues are further studied and quantified.

The DEIR should be turned down by MEPA until the FTA makes a decision on the alleged discrimination in the process or mediation takes place. If not, MEPA opens itself up to charges of discrimination on its own part by knowing that a complaint is there and that is being judicated by the FTA and no decision has been reached by the FTA at this writing.

The DEIR leaves our small business community vulnerable with unrealistic statements made by state bureaucrats who do not know how business runs. In fact, as one of our Executive Committee members pointed out, the EOT appears to see "Medford as being the environmental toilet for Winchester, Arlington and Somerville."

Therefore, we believe this project requires further studies in specific areas before this project can be environmentally approved in a final FEIR. We believe for financial considerations this project should be broken down in to further phases. Phase I should be the build to Lowell Street with the spur to Union Square. Phase Ii should include the maintenance facility center. Phase III should be Lowell Street to Ball Square. In each of these phases the project should be analyzed and assessed for its actual impact upon parking, land acquisition, and socioeconomic impact before the next phase begins. In essence, theories need to be proved and we have the opportunity at this juncture to require a test of these hypothetical theories as we see impact unfold.

Doing this project in phases is not unusual and is similar to what occurred in the Orange Line build out process. As people became accustomed to living with this project, it became more and more acceptable to extend deeper into neighborhoods. The reason we would recommend stopping at Ball Square, where intended in the original SIP plan, is a financial one.

We have read reports by ReConnecting America, who documented for the city of Somerville the dramatic changing socio-economic demographics of Porter and

Davis Squares after initiating the operation of the Red Line. Their report documents that middle to low income people were pushed out of these areas. The phasing in of the Green Line project will educate us if successful housing strategies actually can be implemented to prevent further displacement and pushing out of populations with this proposed expansion.

It should be assessed if the environmental justice and disability community actually gain jobs from this transit project, not only in downtown Boston but also within the 128 belt. We cannot just claim in theory that a project will provide jobs, we need to see concrete evidence in how it will create jobs. It is a fact that the working disability community approaches over 20% in unemployment levels within its community. And there is no doubt for those who study this community that it is a community that wants to work.

Yet EOT in its opaque claim shows no tangible evidence by the Commonwealth of Massachusetts to assist this community in job seeking within this project's intent. There is no reference to labor research pertaining to this community to prove EOT's claims that this project benefits both the environmental justice and disability community in finding jobs. What type of jobs and where? Yet, the Dept. of Labor's Office of Disability Employment Policy has issued recent research reports in how to advance employment for people with disabilities. But without groups like GLAM advancing these types of reports and advocating their use within project studies, they never see the light of day.

As it has been stated in the Rappaporte Institute's report, the jobs are moving out to the suburbs while Boston is being dominated by university expansion. A CTPS traffic study on the Alewife Brook Parkway correlates this information when it also determined the majority of traffic to be moving to the suburbs as opposed to downtown Boston.

The Rapporte Institute's report has all ready stated that the jobs downtown will be for educationalist, which brings us to the point of Tufts University and its tentacles within the community. Though Tufts has gotten a free hand to develop in Somerville, it has had a great resistance in Medford. MGNA, a Tufts favored group, has stated many times publicly that bike paths and community walk ways will benefit Tufts University students and is the way to go for station access. For financial reasons we may want to agree with them and give them the ability to walk and take bicycles by stopping at Ball Square, thereby, saving the Commonwealth millions of dollars of mitigation, particularly in rehabbing Tufts' buildings. It is obvious Tufts own shuttle transportation costs will be reduced when and if the proposed Green Line extends to Ball Square or College Avenue. We suggest that if Tufts wants the proposed Green Line Extension built to College Ave than the state should do as Reno, Nevada did with their transit project and require those who benefit to contribute a large donation to this project for financial reasons.

DEIR/Mitigation Review:

Our DEIR/mitigation comments will focus on what we believe to be significant issues. This does not mean that GLAM does not have other concerns with the DEIR report that should be addressed.

Land Taking in Medford

GLAM stated from the beginning of the EOT process that our public position is that we are against any kind of land taking. We believe that property rights for both abutters and small businesses are paramount especially in an area where affordable housing and jobs for working people are essential in sustaining socioeconomic diversity. Property rights should not outweigh property benefits.

In the current DEIR, EOT has identified major and minor land taking in Medford and the loss of jobs in Medford due to this land taking. With unemployment in Massachusetts over 9%, EOT has cavalierly stated that the loss of jobs they estimate in Medford is insignificant. Let's step out from under the public relations hype and step into reality. EOT states ". . . the jobs at stake represent at most a minor economic impact." With food pantries at capacity in Medford, foreclosures still occurring and unemployment in the country at a 26-year high and expected to climb, any job loss is a significant loss and a significant socioeconomic impact to our community. We are offended by the Commonwealth's disconnect to the realities that their citizens face.

EOT makes conclusive, undocumented statements that "Many of the jobs displaced would likely be relocated or replaced within the affected cities." (Executive Summary, page ES-33) They go on to state that there is an inherent economic advantage to having the Green Line close to Tufts University inferring that Tufts University would hire these lost job positions. Is Tufts University who lost 25% of its endowment over the last year guaranteeing they are picking up these lost jobs in Medford? If so, let's get that in writing. How does EOT come to the following conclusion? "Therefore, many of the jobs affected – particularly the office positions displaced in Medford – would not actually be eliminated but only relocated locally." There is no concrete evidence to this statement only assumption.

O-014-001

We actually contest the estimated 224 job loss number listed for Medford and believe it to be much higher than EOT is indicating. The Cummings Property representative at the public hearing in March 2009 at the Brooks School in Medford mentioned at least 700 jobs in just the 200 Boston Avenue building. This also does not take into account anticipation of impact on job loss due to traffic mitigation proposals EOT has for the Medford Hillside businesses. They

O-014-001

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

O-014-002

plan to eliminate parking spaces by reducing current parking inventory and turning it into turning lanes at the intersection of Winthrop St. and Boston Ave. This removal of parking spaces impacts businesses that depend not only upon walk in business but drive up business. And who can anticipate the number of businesses that may go out of business when construction of this project impacts customer's ability to access local business? There has been no articulation of how EOT plans to address these economic issues in the construction phase.

In fact, the proposed land taking in Medford especially of the Elizabeth Grady Building and the 200 Cummings Property building actually stymie economic development in our community. Recently Mayor McGlynn negotiated the addition of an Italian bioscience firm at the 200 Cummings property location. This firm is gearing up to bring jobs and revenue to our community. Why would Medford want to jeopardize this expansion opportunity for speculative theories from EOT?

The property tax values listed on page 5-16 of the detail DEIR assessment also appear to be understated. In visiting the Medford assessor's office this summer, GLAM representatives found the 200 Boston Avenue building to be actually worth $265,000 in property tax value and not the $122,000 that EOT is claiming based upon their estimates. This discrepancy makes EOT's numbers very suspect for other properties listed such as the Elizabeth Grady building.

O-014-003

We also believe based upon the maps provided in the DEIR that not all land acquisition has been identified. For example, the project juts into property at the Winthrop Street bridge headed down the hill toward George Street. Are we to assume they will not be some land acquisition at this bridge reconstruction area? Also, the 196 Boston Avenue property is sited with land acquisition and is not mentioned on the list even though EOT maps show land acquisition graphs cutting off portions of this property for the drop off area.

O-014-004

Piggot Road is targeted with noise, vibration and land acquisition. The land acquisition grid actually shows a house close to the track being severely impacted by land acquisition right up to its back door. EOT on the other hand expects us to believe that this is not an impact. The quality of life for this particular residential street is so severely impacted that it makes living within this street intolerable. As health professionals understand, destroying a neighborhood's culture, restricting its green and open space and abruptly invading its private space has resulting impacts to mental and emotional health as Dr. Marlene Warner has pointed out to us a scientist.

O-014-005

We anticipate that if this project goes to Route 16 that these residents will be targeted by speculators who will take advantage of the situation and low-ball the real estate values. We believe this situation will also occur for those homes that will be isolated by a Route 16 station as they will be surrounded by the MBTA

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O-014-002

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting businesses and properties will be maintained at all times. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during design and construction.

O-014-003

DEIR/EA Section 5.2 describes the Project's potential temporary and permanent acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts. Properties referenced on this page of the comment letter are not impacted by the Proposed Project to College Avenue and are not included in the proposed acquisitions and relocations.

O-014-004

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-014-005

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the

O-014-005

and the constant in and out of drop off, bus traffic and poor maintenance of surrounding MBTA property as seen in the maintenance today.

For these mitigation reasons alone, GLAM cannot support this transit project beyond College and Boston Avenue. We in fact would encourage the city of Medford to deny all permitting beyond this area.

It is clear to GLAM in reviewing this DEIR and in contacting abutters mentioned in land acquisition that they have not all been notified by EOT of this project despite EOT's contentions to the contrary.

Transit impact on abutters by moving commuter rail closer to homes

O-014-006

EOT has proposed in the DEIR moving the commuter rail closer to abutters' properties without mitigation of the diesel pollution that currently exists. Abutters all ready experience environmental pollution from diesel particles on their homes, cars and land. By moving the commuter rail closer to their homes, this problem will only exasperate these environmental issues. GLAM and abutters have called several times for a health study on the affect of diesel particulates on this area and particularly in the area of the Walkling Court elderly HUD housing program where there is a vulnerable population of disability and environmental justice community.

We base our request upon considerations that other environmentalist groups were projecting, in which later a California Environmental Protection Air Resource Board study of December 2008 verified their findings. That environmental study has found diesel particulate matter contributes to premature death, lung cancer and increased respiratory and cardiovascular hospitalizations. The study results point out that those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems. We believe that the Walkling Court housing program fits into the latter population. These conclusions correlate with a recent study done in New York City where similar health impacts were found upon those living near subway stops, bus depots and areas of traffic congestion. We requested health studies such as this prior to these findings and continue to request health studies to the date of this report with no studies being done.

EOT has not met our request to separate out diesel particulate matter impacts from ambient particulate matter pollution studies despite this recommendation by the California EPA Air Resource Board and supported by other environmental scientists. Nor have they met our request for health studies upon the Route 16 MVP area. Our environmental advisor, Dr. Marlene Warner, states diesel exhaust does not equal auto exhaust. Diesel effects must be separated out in air quality studies. She also states it is essential to locate or create a cancer incidence and type survey for this particular area of Medford both over time and separate for age and race. This is a basic and fundamental need. Though we

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Commonwealth from extending the Green Line beyond College Avenue at this time.

O-014-006

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the air quality impacts from relocating commuter rail lines closer to homes and the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency. The preparation of a health study is beyond the scope of the Green Line Extension Project.

provided Dr. Warner's comments to EOT, they did not comply with our request for these baseline air and health studies even after they were made aware of the California study and the New York subsequent study.

We believe these health studies are warranted based upon a report entitled "Environmental Justice Inventory for Ten Communities in the Greater Boston Area" researched and written by Tufts University's Urban and Environmental Policy and Planning Dept. This 2005 report was commissioned by MEPA itself. The City of Medford is specifically highlighted in this report in regards to chronic disease indicators. Medford was noted to have 44 lung cancer deaths at an age-adjusted rate of 61.8, which was higher than the state age adjusted rate. As we noted above, lung cancer has been identified as an issue of exposure to diesel particulate matter. There were 201 cardiovascular disease deaths at an area age adjusted rate of 253.6, slightly below the state age adjusted rate. These numbers need to be updated to create a baseline health impact from this transit project.

We believe this DEIR should not be approved until such health studies are first conducted.

Ridership in Medford

O-014-007

O-014-008

Most of the ridership numbers in the DEIR are based on riders diverting from other forms of public transportation, in particular other light rail systems. Based upon the financial issues the MBTA faces now and in the future, these ridership numbers appear to be just rearranging the deck chairs on the Titanic. The new ridership numbers appear weak. Yet, the DEIR does not address a study of comparable cost/benefits if the state was to address more efficient, enhanced services on existing lines. The EOT is proposing to invest $1 billion dollars in this project while adding $21 million of annual operational costs to the MBTA, an agency all ready suffering from operating deficits and deferred maintenance issues. If we, the taxpayers, were to invest in this project as EOT estimates, which do not appear to include mitigation costs, we would think the public should deserve this cost benefit/analysis to say we are putting tax dollars in the most beneficial way.

Special interests groups told citizens in Medford that people in the neighborhood would walk to stations to use the proposed Green Line Extension as opposed to drive. Advocates have told residents that stations would not cause parking or traffic problems because local residents would be walking to the proposed Green Line. This is unrealistic. But in the DEIR we are told that ridership will increase over the years due to high-density growth. Medford's character is not one of high density as the DEIR points out and to force this change upon our community is to create a quality of life issue.

O-014-007

No other light rail services, or other rail transit services for that matter, service the Green Line Extension Study Area. Therefore few Green Line Extension riders are expected to be former riders of other rail transit services. The projected riders identified in DEIR/EA Section 3.7 are anticipated to come from local corridor communities.

O-014-008

The 2005 *Beyond Lechmere* study and subsequent consideration of Green Line Extension alternatives have considered enhancements to existing MBTA rail and bus services.

Despite recommending no parking garage at this time, EOT coyly leaves the door open to put a 300 car-parking garage at the Cummings Property site. As Mr. Woelfel was quoted as saying in a local access show out of Arlington over a year ago that he anticipated putting an "Alewife" type garage at Route 16. We believe that EOT actually intends to build this facility to divert traffic to our area from the Alewife facility and are only waiting for the public's eye to wane on this project in the future. After all, the DEIR is an open contract as it now exists.

O-014-009

With the amount of property EOT plans to take at 200 Boston Avenue, we can only surmise that EOT will use this facility to put up this garage and possibly put a car barn at this location for bus layovers. We based our statements on EOT's stated intent at a Winchester public meeting to bring buses from Winchester, Woburn, Burlington and Arlington to this drop off area to boost weak ridership numbers. Buses through this area would have to go through the West Medford community, a historic African American community. We believe that either scenario would cause an undue environmental burden upon this environmental justice community. As we have stated previously, we would be opposed to bringing this project forward from College and Boston Avenue based upon these quality of life and mitigation issues.

Traffic Congestion in Medford

O-014-010

It is unclear in the DEIR as to when EOT took its traffic measurements. If for example, EOT took vehicle traffic counts at Winthrop Street and Boston Ave or at Route 16/MVP in the late spring/ summer, than they have under estimated the impact of traffic in the area. It is well known that when Tufts University reconvenes in the fall, traffic impact increases in these areas as students arrive back in the area.

O-014-011

EOT's mitigation proposals around traffic control have impact to Medford parking inventory. They propose elimination of parking spaces at Route 16/MVP and at the intersection of Winthrop Street and Boston Avenue, impacting upon the small businesses in that area that depend upon car traffic as well as walk in business. These measures would have a negative impact upon revenue generation for these businesses. EOT also proposed elimination of parking spaces in Ball Square, which could impact upon the South Medford area in terms of park and hide, an area all ready experiencing traffic and parking problems. There are no real concrete solution to these problems from EOT other than it is the city's problem. EOT needs to come back with stated corrective action measures that articulate any further mitigation and who will be picking up the cost.

It appears that if EOT's inferred traffic mitigation measures do not work EOT can actually drop the responsibility for this condition back into the hands of the cities by stating that these conditions are not attributable to the proposed Green Line Extension project. For example, EOT is proposing a turning lane on the bridge at College and Boston Avenue as a mitigation measure. Yet we can envision

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O-014-009

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-014-010

Page 4-42 of the DEIR/EA identifies the dates traffic volumes were collected, which were available on November 7th and 8th, 2007. Volumes account for Tufts University-related traffic and were recorded when all schools were in session.

O-014-011

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

drivers using this lane to drop off riders to the MBTA station instead of the designated drop off area. We can also envision these drivers impeding traffic as they try to use this lane to head down College Ave toward Somerville or down Boston Avenue toward Ball Square as opposed to turning toward Route 16/MVP.

As Mayor McGlynn stated in the city's public comments to the EENF released in 2006 he states his concerns for the unique challenges this intersection creates that are exacerbated by the College Avenue bridge feeding into this intersection. As he notes this intersection has a high traffic count, irregular turning movements with a significant number of university students walking through this campus area. We do not believe that EOT has addressed in their mitigation the Mayor's assessment of this intersection as a dangerous area. This issue needs to be addressed.

To understand traffic mitigation, one must understand human behavior. We believe the measure that EOT has proposed for this bridge will only enhance the danger of this intersection and its impact upon public safety. In fact, we cannot envision how people with disabilities would be able to navigate this hectic situation as they try to access elevator and escalator entrances on the opposite side of the drop off area.

O-014-012

O-014-013

Based upon EOT's mitigation proposal cities would have no recourse in obtaining EOT's project funds for corrective action if future traffic congestion actually is not solved by EOT's measures. We recommend then that EOT work to determine within the DEIR appropriate traffic controls. It is not apparent that they have done so prior to this DEIR report. We propose that it should be required in the DEIR that all parking and traffic controls be monitored during the first five years after the system opens for operation. If EOT's implemented controls are found to be insufficient EOT will be required to provide all funds for all corrective action as determined as needed by the cities impacted by this project.

As Wendell Cox, a Senior Fellow at the Texas Public Policy Foundation, writes in his article, "The Illusion of Transit Choice" found in the Quarterly Journal of Public Policy in Texas, rail does not reduce traffic congestion. He points out traffic congestion is getting worse everywhere – in urban areas with new rail systems, and in areas without them. In looking at transit choices as alternatives that bring drivers out of their cars, one must consider whether these choices are auto competitive. As he states, the minimum requirement for auto competitiveness is transit service that is fast or nearly as fast, from origin to destination, as the automobile. This means taking public transfers into consideration as well when speaking of origin to destination. Although the proposed Green Line may get you to Boston, what is the time to destination when taking into consideration transfers to other lines to get to your final destination? And since the trend in the country has been decades of suburbanization, hence there has been significant growth of jobs out in the suburban areas. As has been already been proven and pointed out in our comments, cars are going to jobs in the suburbs. Therefore the

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O-014-012

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for parking or passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical.

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns.

O-014-013

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

flexibility the car brings to convenience of reaching a job in the suburbs versus a fixed rail system that limits destination to downtown does not point to the conclusion that there will be reduction of traffic congestion to the Medford area.

Recently Parade Magazine highlighted a poll in its Oct. 18, 2009 issue that asked the question, Should America cut funding for roads in favor of public transit? The results showed the following, 51% of the public said no. Their reason was the following, "Mass transit doesn't go to enough locations on a frequent enough schedule to make it worthwhile. Driving is a better alternative." This poll correlates with Mr. Cox's study conclusion that for transit to have any hope of attracting people out of cars, it must be available in a form that is auto competitive. Although EOT has shown the proposed Green Line's extension's competitiveness with current bus service, it has not shown it to be auto competitiveness. Therefore its conclusions that traffic congestion will be reduced are again theory without practical application based upon other transit studies on traffic congestion. This issue raises the question as to whether the proposed Green Line Extension is going in the areas of best benefit.

O-014-014

Parking

O-014-015

- ✓ Hide-and-ride impacts may occur in station areas. To identify appropriate parking controls, EOT should be required to conduct on-street parking inventory surveys now around each proposed station area up to one year prior to the possibility of station openings to document existing on-street parking supply within a half mile radius of the proposed station areas. We believe they have not identified this inventory within the DEIR. Based upon surveys, we recommend that EOT work with affected neighborhoods to identify and implement appropriate mitigation elements within studies prior to any proposed station openings.

O-014-016

- ✓ Mitigation issues should include time-limit signs, parking meters where appropriate, passenger drop-off/pick up zones, truck and load/unload zones, and residential parking zones (RPZs) within a half a mile radius of each station. We do not see proposed mitigation within the DEIR that expands beyond the immediate station areas. EOT should be required to provide funding for implementing appropriate parking controls, labor and all other related installation costs for these mitigation issues and we believe the cities should insist that these measures extend to within a half-mile radius.
- ✓ EOT staff should be required to monitor all parking controls during the first five years after the system opens and determines if RPZs boundaries or other parking controls are insufficient. EOT should be required to fund any expansion of existing or newly created RPZs or other parking controls during the first five years following any proposed station openings.

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O-014-014

Reductions in regional traffic volumes and vehicle miles traveled (VMT) indicate that the Green Line Extension is competitive with automobile travel within the Somerville and Medford communities.

O-014-015

An on-street parking inventory within 500 feet of each proposed station was conducted in the DEIR/EA as specified in the Secretary's Certificate on the EENF.

DEIR/EA Table 6-1, Project Mitigation Commitments, lists the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination.

O-014-016

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering. MassDOT will work with the local municipalities to develop a parking enforcement program.

Visual Resources and Aesthetics

The Hillside area has many trees, vegetation and animal and bird habitats along the commuter rail. This woodland habitat is an appealing, valuable environmental, and neighborhood characteristic for those abutters who live along that area. This woodland barrier also acts as a natural sound and diesel particle emission barrier for the commuter rail and traffic and buses on Boston Avenue. It also acts as a light barrier for the railroad and Boston Avenue and provides shade in the summer. We believe the State Shade Tree Law should be investigated as to its pertinence to this area and should be an included requirement within the DEIR. We have not seen such consideration of this law within the DEIR. In fact we are greatly concerned and opposed to the number of trees that EOT has proposed to cut down such as oak and maples.

Many of our membership who lives near the commuter rail have had negative experience with the MBTA and its vegetation replacement program. Once the MBTA puts in place its replacement vegetation program it rarely revisits the program to measure it success or to maintain the area.

O-014-017

We are aware that many abutters in that area are concerned with the destruction of this area by EOT's proposal to move the commuter rail closer to their homes, the construction to accommodate the proposed Green Line tracks and the impact on the wildlife in that area. EOT within the DEIR seems to treat this concern with little veracity. MEPA should require further studies on this mitigation issue and should demand that EOT come back with a further demonstration of how they will protect this woodland area without removing trees and vegetation and disturbing animal and bird habitats.

The proposal of any retaining walls by EOT in their studies that does not disturb the woodland area should incorporate aesthetic retaining wall design measures, such as steps, patterning, texture, and vegetative planting that blends into the scale and character of the neighborhood all paid for by EOT funds. In other words, any retaining wall should enhance the character of what is all ready there, not replace it.

Air Quality

O-014-018

EOT has all ready admitted in the DEIR on page 6-8 of the detail assessment that this project would cause some localized decreases or increases in carbon monoxide and particulate matter. These areas have not been pinpointed within the DEIR and MEPA should require that this information be held transparent to the communities involved and that mitigation measures be identified.

O-014-019

MEPA should require that EOT provide a stand-alone study of Medford's current air quality especially in light of the health study we are demanding for our community. EOT needs to guarantee that Medford's air quality is not going to be

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O-014-017

DEIR/EA Section 5.10 addresses Project impacts to wildlife and plantlife. The Massachusetts Shade Tree Law (MGL Ch. 87) defines public trees as those within a state highway, not a railroad right-of-way, and does not apply to the Green Line Extension. In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. Public input on mitigating impacts to vegetation and landscaping will be sought.

O-014-018

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

O-014-019

The preparation of a health study is beyond the scope of the Green Line Extension Project. However, the Project will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

O-014-019

negatively impacted by additional traffic congestion and or the movement of commuter rail tracks closer to abutters' homes. We, as citizens, need to be guaranteed through scientific studies that our air quality is not being negatively impacted by additional traffic congestion as we have seen in the Wellington Circle area with the TOD development there.

As we understand it from EOT advisory committee meetings, the DEIR air quality projections are founded in part on projections of high rates of alternative fuel/electric car ownership over time as non residents increase their use of the proposed area. As Dr. Warner advised GLAM, it makes more sense in these economic times to project the numbers for 15-20 year old high polluting cars and trucks that private, business, taxi and city users will be desperately sustaining during these economic times and into any recovery. Therefore, we believe that air quality studies should be done based upon current car and truck air quality usage.

Noise and Vibration

In regards to EOT's claims regarding mitigation for noise and vibration, we can only refer to the recent article in the Boston Globe, dated November 1, 2009, titled "Too Close for Comfort." This article articulates that many of the proposals in the current DEIR, such as insulating windows, do not address noise and vibration in the long term. Too much of the mitigation proposed by EOT regarding noise and vibration depend upon the ability of the MBTA to maintain tracks and keeping tracks lubricated over the years.

Based upon the current maintenance conditions at the MBTA, it is self evident that this simple plan does not work. And anyone who has ever ridden the Green Line knows that is one of the most troubled of transit lines within the system. We cannot think about what a project reveals when first brand new; we must anticipate the issues of 10-20 years down the road when maintenance schedules break down. In the October 20, 2009 MetroBoston newspaper, there is an article entitled "Outrage outpaces problems for now". This article mentions the issue transit riders have concerning the $2.7 billion maintenance backlog on the Green line. During the period of September 1 – October 9, 2009 the MBTA reported Green Line service failures due to the following causes, 36% was caused by brake issues, 15% by door problems, 15% due to propulsion problems and 15% due to electrical issues with 19% of problems accounted for other problems not specifically identified.

Much of noise and vibration depend upon driver operation and good maintenance. There are no proposals within the DEIR to slow down transit traffic and no evidence that noise levels were tested with consideration of both the commuter rail and transit trains running at the same time. We caution MEPA and abutters that mitigation as proposed by EOT is dependent upon MBTA maintenance. This proposal is unrealistic and can negatively impact upon the

quality of life. This is evident whether it is issues pointed out on the Green Line or in the above-mentioned article we have found on abutters fighting the MBTA on the Orange Line mitigation issues that have grown over the years.

It has also been identified in the Consumers Reports on Health publication that noise pollution is correlated to high blood pressure problems, especially in populations under 60. Therefore full mitigation in this area is important to the quality of life for our residents.

O-014-020 The EOT/MBTA should be required to develop a vibration and noise-monitoring system with agreed upon thresholds of vibration based upon residential neighborhoods. The EOT should be required to perform these analyses on a regular basis if the proposed Green Line extension is implemented. Failure to do so should subject EOT to monetary penalties that would go to the cities impacted to institute future mitigation fund recourse for residents and local businesses. As we read in the above-mentioned Globe article on mitigation, the MBTA and state are rarely willing to correct problems that arise over the years from poor maintenance on transit systems.

Water Resource Impact at the Mystic River:

O-014-021 We are greatly concerned that the DEIR has identified wastewater discharge from Ball Square up into the Mystic River from this project. We would be seriously opposed to this environmental impact on the Mystic River. Best management practices around water quality resources should be incorporated in the DEIR as required to meet applicable city, state and federal standards and requirements.

Electromagnetic Fields due to light rail consumption:

O-014-022 Light rail, when electricity generated, uses electromagnetic fields. In fact, the MBTA is the greatest consumer of electricity usage in the state according to records we have read. In fact, there is no comparative study to determine if the energy usage of expanding this system actually negates any energy benefit identified. EOT has actually given short shrift to the impact of substations and electromagnetic fields in the expansion of the proposed Green Line. The MEPA should require that the EOT's DEIR identify if there will be any adverse impacts to human health due to electromagnetic fields.

Recently the city of Medford experienced electrical supply problems in South Medford over a two-day period where residents were left without light and heat. How does this additional demand on electrical systems affect an all ready over burdened problem? This question has not been identified or addressed in the DEIR.

O-014-023 In fact, we have researched that DC rectifiers primarily power light rail systems. If left uncontrolled, stray currents originating from light rails and substations can cause corrosion of buried structures and piping. Light rails systems in close proximity to many underground utilities such as water, gas or sewer pipelines may be affected by stray current corrosion. Repair of these kinds of problems can be difficult because light rail systems have to be shut down prior to excavation. EOT has not demonstrated in the DEIR what steps they propose to take to ensure that stray current has been addressed in its plans and construction.

O-014-024 Also, the DEIR appears to only mention a substation in Somerville. We cannot believe that the electricity demand of this project would not require other substations in other areas. Substations need to be clearly identified.

Public Service Safety and Security Plan:

O-014-025 The MEPA should require that EOT in its studies determine a safety and security maintenance plan for policing of stations and neighborhoods. This plan would include developing procedures throughout proposed project design, construction and operation. Although EOT identifies that the MBTA will be responsible for emergencies and security issues, it is unrealistic to think that the city's first responders will not be first on the scene to protect citizens. Who will pick up this cost? This is a cost issues that needs to be identified within a cost analysis.

Walking Court Housing:

We cannot express more than we have all ready our concern on the environmental impact on this elderly disabled and environmental justice population who live at Walkling Court.

EOT has claimed there would be no impact on this housing program and also claimed that this housing was not in an environmental impact area. Yet we find this housing program under the noise mitigation map but not mentioned
O-014-026 specifically in the DEIR. We oppose any extension beyond College Ave and Boston Ave due to these numerous mitigation issues that have not been addressed specifically regarding this home to elders.

O-014-027 ♦ Noise and vibration impacts both in operation and construction of this potential project must meet HUD thresholds. EOT has not documented this project's impact or that it meets the HUD vibration or noise thresholds.

O-014-028 ♦ What is the potential of increased hide and ride parking in this area? This has not been addressed in the DEIR.

O-014-029 ♦ Disturbances by Pedestrians using the Walking Court site to cut through to station locations will be a problem that has not been addressed in this DEIR.

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O-014-020

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-014-021

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility. There would not be any wastewater discharges to the Mystic River.

O-014-022

MEPA did not require that the DEIR/EA address this issue. Present understanding of the health effects of long term exposure to electromagnetic fields is incomplete, but shows that risks to the health of children and adults are either low or nonexistent.

Bus Routes in Medford:

O-014-030 It is unreasonable to believe from a financial perspective that EOT would continue to run a bus route that mirrors the route of the proposed Green Line Extension. We would like to see an alternative that demonstrates air quality benefit if hybrid buses are used on this route instead of extending the proposed Green Line extension.

O-014-031 EOT states light rail to be faster in accessing Lechmere station. But citizens who currently ride the bus to Lechmere tell us that when you take into consideration the ability to transfer to get to areas such as Longwood Medical area, the bus actually takes less time because it provides more flexibility in transfer connections than transferring downtown at Park Street on the Green Line.

O-014-032 Also, EOT has stated at its November 2009 hearing in Somerville that they will be reassessing the use of these bus routes as implementation of the proposed Green Line plays out over the next few years. We believe the discontinuance of any bus routes currently in Medford will cause increased traffic congestion as people resort to driving to work or resort to kiss and ride drop off. The reduction of any bus routes actually diminishes transit and choice of transit for those who reside in West Medford. The discontinuance of these bus routes we believe will have impact on the planned development of Medford Square since the 326 Haymarket express, the 94 bus to Davis Square and 95 bus to Sullivan Square stop in Medford Square for pick up of passengers.

MBTA Assessment fees and other costs:

O-014-033 The DEIR does not address cost in any fashion that specifically shows a cost breakdown for this project. We recommend that any cost analysis of this project must identify potential increased MBTA assessment fees to the city of Medford, identify any electrical cost increases to its citizens and any additional public service fees upon the city of Medford.

Smart Growth versus Fair and Sustainable Growth:

As GLAM has stated in prior public comments, we support community development projects only when they instill the stability, affordability and quality of life of neighborhoods so that deep bonds of commitment to the community can be developed through family and social organizational ties. We believe the public should be cautious concerning the proposed Green Line Extension project and EOT's encouragement for Smart Growth. We make these comments upon the findings of the Reconnecting America report, which focused on the changes in Porter and Davis Square that ended up excluding middle to low income populations.

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O-014-023

MassDOT is aware of common issues related to stray current. As part of the design scope, solutions will be proposed to address stray current throughout the corridor. Related issues are typically not addressed in conceptual design.

O-014-024

The DEIR/EA and FEIR include conceptual Project designs. Traction power designs will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-014-025

During preliminary engineering, system safety and security plans will be developed to address stations and emergency response personnel during construction and operational phases. MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during and after the construction phase.

O-014-026

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

O-014-027

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension

O-014-034

As part of GLAM's principles and objectives, we challenge EOT's conventional wisdom around the economic theories that EOT is promoting called university expansionism. As we have stated before in comments, many abutters to this project are moderate income residents who fear of being displaced or priced out of their neighborhood as advocates push the concept of higher property values with the proposed Green Line. Affordable housing is not just a city issue; it is a state issue especially when the state is promoting forced changes in the DEIR upon a community as opposed to natural change.

O-014-035

As pointed out through Census Bureau 2000-2008 estimates of population, North Reading and Middleton's population has seen fast growth increases while Somerville's population was down 2.5% during this same time period. Even when looking at the 2007-2008 time period, Medford and Somerville both only had slight increases in population. These figures are collaborated by the weekly real estate transaction reports where Somerville has seen decreased sales in condominiums and single family home sales. These population trends show folks moving to suburbs such as North Reading and Middleton for better quality of life and education issues as well as lower property taxes. Therefore that is also why we feel riderships numbers should be reviewed within the contexts of loss population trends.

Americans with Disabilities Act

O-014-036

Although EOT has spoken of stations being in compliance with the ADA, we do not see enough specifics mentioned in the DEIR to ensure this compliance has been fully accounted within the DEIR. Therefore, we are providing some questions/comments regarding ADA that we do not see addressed in the DEIR. These questions/comments are not meant to be construed as fully addressing all ADA concerns. It is not the job of GLAM to develop an accessibility design review checklist for EOT. But we do believe that there should be an extensive accessibility design review provided within the DEIR to ensure compliance for the disability and elderly community.

O-014-037

(a) Are curb ramps provided at all sidewalk and drop off areas? And are all disability access modes near the main circulation route?
(b) Are all accessible gates and turnstiles located in an accessible path?
(c) Are all walkway surfaces paved, uniformed and surfaces slip-resistant?
(d) Are all sites graded to direct flow of water away from walkways?
(e) What is the measure of slopes and are they in compliance with ADA access board architectural standards?
(f) Do all detectable warning surfaces have raised, truncated areas and in color designation?
(g) Are handrails and guard rails included at proper height?
(h) Within parking and drop off areas, have the required number of accessible parking spaces been designated or considered in the design of drop off areas? Are the accessible parking spaces located

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Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. No impacts are anticipated at Walking Court Housing.

O-014-028

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout and access at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-014-029

Please see response to Comment O-014-027.

O-014-030

Bus alternatives were evaluated for the Project, as presented in DEIR/EA Chapter 3. These alternatives assume the use of vehicles with similar emissions characteristics to hybrid electric transit buses.

O-014-031

Both the Green Line Extension College Avenue and Union Square branches would provide a direct light rail transit connection to the Longwood Medical Area without transferring.

O-014-032

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work

O-014-037

on the shortest possible accessible route of travel from adjacent parking to the accessible station building entrance? Have these issues been considered when looking at drop off areas such as College Avenue?

(i) Will there be posted warning signs with the international symbol of accessibility at each accessible drop off area with penalties mentioned for violators?

(j) Does each passenger-loading zone have an access aisle at least 60 inches wide and extend the full length of the vehicle pull-up space they serve? For example, is there room for The Ride to drop off people with disabilities? And have these plans been incorporated in station designs at areas such as College Avenue when considering reconstruction of this bridge area?

(k) Wherever practical do exterior ramps or waiting areas have roofs or protective coverage for people with disabilities?

(l) Do all elevator cars have slip resistant surfaces? Do elevators have handrails at appropriate height and control panel buttons within appropriate height? Do all elevators have a self-leveling device to bring the car to floor landing?

(m) Are all elevator car alarm and emergency stop buttons and emergency communication grouped at the bottom of the control panel, with their centerlines no lower than 35 inches above the car floor? Will control panels have accompanying Braille designation?

O-014-038

(n) Will all Green Line cars have similar floor leveling capability to bring a wheel chair on board? Will there be attendants at each station for passengers with disability access needs?

O-014-039

(o) Will the proposed Green Line station have audible signals to announce cars arriving and departing? Will these audible signals as well be in elevators? Will there be visual signs for those who are hearing impaired for the same designations?

(p) Is weather protection planned for the outside elevator entrances?

(q) How will the disability community access trains inbound and outbound?

These items listed are not to be considered inclusive of our ADA concerns. We suggest that EOT access the Puget Sound Transportation Accessibility checklist. This checklist is extremely comprehensive regarding ADA requirements in all aspects of providing public transportation.

O-014-040

In a letter provided many months ago to a past EOT Secretary, we had surveyed a disability program to find their concerns about public transit regarding the disability community they served. Two major concerns arose. The first is the fact that the Charlie card system was often difficult in access for those with physical disabilities. For those with developmental disabilities, literacy can be an issue when using the Charlie Card. Both these populations suggested that there should be an MBTA customer service staff available to assist with these issues. The second concern was those with disabilities are often preyed upon by other

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with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-014-033

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

O-014-034

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

O-014-035

Ridership projections presented in DEIR/EA Section 3.7 were developed by CTPS and include estimates for various access modes, including walking, biking, bus and car. Methods for developing the ridership

riding populations. For example, there were those in the survey who had been robbed on light rail and when riding a bus. Others experience verbal and physical abuse and harassment at MBTA stations. Their recommendation was that there should be more security available and more trained MBTA staff available at station sites.

Unlike EOT, we believe that the MBTA settlement with the disability community does require that there be manned stations to address these types of issues.

O-014-041

We also have raised the question with FTA in our report/complaint as to whether the state can expend billions of dollars on a new project without first bringing all, older stations into ADA compliance, such as Boylston Street station and Symphony Hall station as examples. This question should be answered before there is approval of the proposed Green Line project.

Environmental Justice and the Disability Community

GLAM's purpose is to give authentic voice to those segments of the population who are being excluded from the EOT process. GLAM's credibility in the community of Medford is unique in that it is neither an advocacy nor an opponent group. GLAM is an educational group that has tried to force transparency in this project, posed the hard questions to EOT for those citizens who have felt disenfranchised by the EOT process. We have submitted public comments throughout the process, pointed out the need for additional environmental study considerations and provided research on the disability community to EOT to enhance their knowledge of the American with Disabilities Act (ADA) and its long reaching impact in this project. It is well known that consideration of the disability community is often omitted from many governmental studies such as found in the DEIR preparation work. In fact, the Dept. of Labor has just begun this year to track unemployment statistics of the disability community.

O-014-042

We believe EOT and special interest advocacy groups have demonstrated legal and cultural incompetence [2] when dealing with the disability community and its civil rights laws. Therefore, we cannot believe that they have the best interest of these populations within the project. This cultural incompetence has lead GLAM to support a civil rights report/complaint to the Federal Transportation Administration submitted by its individual members. This report/complaint is now under review by the FTA with an assigned case number.

Cultural incompetence is the lack of awareness about cultural difference and this lack of knowledge can result in an inability to step out of one's position to recognize the difference. Despite a community population's similarities, fundamental differences among people arise from nationality, ethnicity and culture as well as from family background and individual experiences. We define these differences to include race, ethnicity, disability, class, religion, gender, sexual orientation and educational position.

estimate are described in DEIR/EA Section 3.4, Ridership Methodology. Additional details required by the Secretary's Certificate on the DEIR/EA are provided in FEIR Chapter 3, Air Quality.

O-014-036

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-014-037

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

The federal EPA recognized GLAM in 2008 as a public transit group based upon an alternative proposal we submitted to both EOT and the federal EPA regarding the proposed Green Line extension. The federal EPA termed this alternative proposal an enhancement worthy of discussion at the state level. This alternative enhancement was posed to the EOT in anticipation of the mitigation issues we foresaw at the proposed Route 16/MVP site. Our alternative enhancement can be found on EOT's current document site from October 2007.

O-014-043

We had proposed that EOT do an alternative analysis study on taking the proposed Green Line from Ball Square, Somerville by tunnel to Route 16 Clarendon Hill Somerville where it could then connect to the Alewife Red Line station to meet the Urban Ring concept. We proposed that a maintenance facility could be constructed at Route 2 behind Alewife to meet EOT's needs. We provided EOT evidence developed by the city of Somerville that shows there is more ridership at Route 16 Somerville than at Route 16 MVP.

EOT turned down this alternative enhancement and has denied us public access to their quantitative and qualitative data that arrived at this decision. For example, EOT claimed our enhancement did not meet the environmental justice criteria for a transit project area even though the information provided to HUD by the city of Somerville demonstrates a large environmental justice population at Route 16 Somerville than at Route 16 MVP. Although we were told by EOT after several months of asking for this material, that the qualitative and quantitative data would be provided in the DEIR. No such information has been provided and we are asking that this information be put in the DEIR.

As you can see with the maintenance facility issue, when Somerville asks for mitigation consideration, they are provided options that EOT states will cost the state millions of additional dollars. But when GLAM at the beginning of the EOT Advisory process, asked that studies (not the project) be completed on our alternative enhancement to determine its feasibility, EOT gave us little attention and failed to bring our alternative enhancement forward in a transparent fashion. We have found the EOT process discriminatory when considerations were brought forward by the disability and environmental justice populations.

Tunnel Alignment Analysis

O-014-044

During the EOT Advisory committee meeting process, GLAM asked that a tunnel be considered between College Avenue and Route 16 MVP. A tunnel was proposed to alleviate what we saw as severe mitigation issues coming forward if EOT proposed going above ground to this area.

Although EOT prepared a tunnel alignment analysis, they turned down a tunnel as too costly based on numbers they proposed in their tunnel alignment analysis. But this cost analysis did not include the savings to be achieved in mitigation costs if EOT was to do a tunnel in this area. Therefore, the possible savings of

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O-014-038

While the Green Line Extension Project is being design for fully accessible stations in compliance with ADA requirements, the issue of system-wide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this project.

O-014-039

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-014-040

Staffing at Green Line Extension stations will be overseen by the MBTA. Convenience for all customers is a top priority for MassDOT and will be given further consideration during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-014-041

The MBTA has made significant progress in retrofitting its rail transit stations to meet ADA accessibility guidelines. Symphony Hall Station accessibility construction is scheduled for completion in 2012. Full

O-014-044

not having to replace bridges or not having to do some or all mitigation to surrounding buildings was not addressed. We believe that the cost analysis prepared by EOT was not complete without addressing these mitigation cost savings. We believe that had EOT truly explored this tunnel alignment that they might have achieved consensus in the city of Medford on the Route 16 area as the idea took a positive hold among many residents.

This summer members of GLAM explored a capped, depressed tunnel that was created in Reno, Nevada that took Amtrak passenger and freight trains below the city's surface. This train system addressed the pollution problem and inconvenience of a train that passed through the middle of the city, causing both diesel pollution from the trains passing through and the idling of trucks, buses and cars as they often waited for long freight trains to complete their trip and business through the city. This city was much improved by a depressed tunnel that was then capped to provide a community shared path with proper landscaping, ADA accessibility and Western artistry on display throughout the shared path. The shared community path was used as an asset to expand community events near the Truckee River, which flows next to the train tracks.

Portions of this tunnel were hand dug to preserve historic artifacts and buildings and had to accommodate a water way as mentioned above. Therefore, you would think that the cost of the Re-Trac project as is it is best known would be very costly. But we found through discussions with Reno municipal staff involved in the capital project that this 2 ½ mile structure actually cost much less than what EOT was proposing for a similar stretch of tunnel we had requested they explore from College Avenue to Route 16.

Therefore, you must imagine GLAM's surprise when the tunnel idea was turned down by EOT due to cost, while the options proposed on the maintenance facility center for Somerville adds millions of dollars. It seems that Somerville was provided all consideration while GLAM was considered a second class citizen.

O-014-045

We believe that MEPA should require that EOT explore the tunnel option with a full cost analysis that includes mitigation savings, presented to the public in a transparent fashion.

Verbal Comments

O-014-046

GLAM is protesting the fact that the Executive Office of Energy and Environmental Affairs (EOEEA) is not accepting verbal comments for public record on the Draft Environmental Impact Review (herein called the DEIR report), EEA number 13886. In attending the public hearing on November 18, 2009 in Somerville on the DEIR, where EOEEA did not appear to be in official attendance, it was not clear that EOT would be transcribing the verbal comments made at those meetings to EOEEA for their review process. Our understanding is that the Federal Transit Administration (FTA) is asking for transcripts of these verbal public comments. We believe that verbal and written comments should be

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accessibility at Boylston Station is not yet programmed. As presented in DEIR/EA Appendix G, the Green Line Extension offers substantial mobility enhancements for disability populations.

O-014-042

Impacts to environmental justice populations resulting from the Proposed Project are described in DEIR/EA Section 5.4, Environmental Justice. During the DEIR/EA phase, outreach to both disability and environmental justice populations occurred. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice and disability communities that will be made as the Project progresses through its next phases. Additionally, the Project is being designed to comply with all requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA.

O-014-043

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the State from progressing the Project beyond College Avenue at this time. The Green Line Extension Project does not include further extension to Alewife.

O-014-046 included in all Commonwealth public reporting for the purpose of a diverse inclusive process that includes comments from all, not just those skilled in written communication.

We have made our complaint known to Mr. Donald Gomes, affirmative action officer for the Mass environmental agency in November as we believe EOEEA's process in excluding verbal comments violates the Americans for Disabilities Act (ADA). Mr. Gomes as of this date has failed to respond to our letter of complaint. This protest letter was copied to the Federal Transit Administration for inclusion in our civil rights report/complaint filed with the FTA regarding what we believe to be public processes used by the EOT that have excluded citizen participation by the disability community and environmental justice populations within this project.

O-014-047 As an organization with representation of the environmental justice and disability communities, we believe that this process is becoming an elitist one as opposed to a process of plurality, especially when you consider that EOEEA will be making a decision within seven days after the January 8, 2009 extended deadline. Denial of putting transcripts of verbal comments in public record for review solidifies this elitist process. The Commonwealth imposes cultural incompetence upon its citizens by denying those with second language issues and those whose culture may be more comfortable in verbal communication the right to have their comments put in public record. The federal government on the other hand demonstrates its progressive stance by asking for the transcript of those verbal public comments. GLAM has notified both the Commonwealth and the FTA that we consider the policies of EOEEA to be discriminatory to various cultures, including the disability community and environmental justice communities. This EOEEA process should be nullified until proper public participation processes are put in place to allow meaningful scrutiny.

O-014-044

As stated on page 9 of the DEIR/EA Executive Summary, several members of the public suggested constructing tunnels for segments of the Green Line Extension. Based upon this interest, MassDOT and the Project team performed an analysis of tunneling as an alternative to at-grade construction. This analysis is available on the Project website at http://www.greenlineextension.org/currentmaterials.asp?area=mls. The report found tunneling to be cost-prohibitive for this Project, especially considering that an at-grade right-of-way is available. Even with mitigation costs included in the comparison, the cost to tunnel from College Avenue to Mystic Valley Parkway/Route 16 would be substantially higher than an at-grade rail alignment.

O-014-045

The Secretary's Certificate on the DEIR/EA did not require further evaluation of the tunneling alternative.

O-014-046

As indicated at the November 18, 2009 Public Hearing, A transcript of the November 18, 2009 Public Hearing was presented to EOEEA as public comment. That transcript is also included and responded to in this volume; please see comment letter I-001. The hearing was recorded by a professional stenographer as an opportunity for individuals to set their opinions on the official record.

Conclusion and Recommendations

If one wants to believe that theoretically the state and its forces have correctly analyzed and standardized what is going to happen in this project, then one needs to review the financial conditions of the state. They will recognize there is limited amount of money for cities and towns and that President Obama has announced he will be decreasing domestic spending to bring debt under control. Based upon the financial picture, we believe it brings the opportunity to require that more concrete studies come forward with conclusive evidence.

This theoretically, abstract DEIR report bases everything on standards that have not been proven accurate. We, as responsible citizens need to see reports with more empirical data. We do not feel that empirical data is in the current DEIR.

Therefore we recommend the following.

O-014-048
- ✓ That the DEIR be forced back for further study to address omissions and errors in the current report that weakens the credibility of this proposed project. For example, there is no presentation of College Avenue as a terminus for Phase I of the proposed Green Line. Therefore, mitigation impacts are not articulated.

O-014-049
- ✓ We believe that Route 16 should be eliminated from the current DEIR due to the severe mitigation it proposes to the city of Medford as currently proposed.

O-014-050
- ✓ This project should be broken down into additional phases that allow the public to see at each phase the actual impact of this project upon communities. This process would allow further studies to determine better mitigation measures and gives cities like Medford the ability to absorb current economic development plans with affordable housing strategies.

O-014-051
- ✓ Although GLAM is not unsupportive of the effort to build to College Ave and Boston Ave, we just do not believe that the theoretical evidence proves the need there since the stations are so close to each other. Using MGNA and STEP's own statements that people will only want to walk or bike to a station, why not walk to or bike to Ball Square in an effort to save money for the Commonwealth? This is of course assumes that Tufts does not wish to contribute to this project, taking a financial burden off the state.

O-014-052
- ✓ Due to severe mitigation and financial impacts upon Medford, we cannot support the proposed Green Line beyond College Ave. In fact, we question the financial viability in doing this project at all, but do realize that transportation is the future growth of our communities. But we want to grow with a population that includes the Disability and Environmental Justice

O-014-047

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-014-052 populations who are currently a part of our community unlike Davis Square and Porter Square where these populations were partly eradicated from this area.

O-014-053 ✓ If the state ever gets the money for this project, we would suggest EOT instead revisit GLAM's alternative/enhancement to Route 16/West Somerville where the largest population in that part of the city is where the disability and environmental justice populations live. But we are willing to recognize that the financial constraint of the state hampers this progress at this time. Or so we thought until EOT was willing to ante up additional millions of dollars for the Option L maintenance facility site as proposed at their December 2009 public hearing in Cambridge. Although we support Brickbottom in its compromise with the state to meet mitigation issues, we also are concerned that this compromise was won at the expense of the disability and environmental justice communities.

Unfortunately if the state takes this financial burden on at this time as it is proposed, we will probably find ourselves in another Big Dig capital project with very little reality coming out of promises made and a great deal of debt burdening the next two generations.

These comments are respectfully submitted by Executive Committee of The Green Line Advisory Group for Medford and other concerned citizens.

Sincerely yours,

Carolyn Rosen
Chairperson
Green Line Advisory Group for Medford (GLAM)

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O-014-048

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA. FEIR Chapter 3 summarizes the impacts of College Avenue as a terminus.

O-014-049

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

O-014-050

The Proposed Project consists of two phases- the extension to Medford Hillside (College Avenue) and the extension to Union Square.

O-014-051

The Proposed Project includes the College Avenue Station and the Ball Square Station. DEIR/EA Section 3.7.3 includes ridership estimates at these stations in the year 2030. Based on the estimates, 2,420 people would board each day at College Avenue Station and 1,890 people

GLAM Executive Committee and other concerned citizens

Mary Ann Aducci
2 North Street
Medford, Mass. 02155

Felix Blackburn
233 Arlington Street
Medford, Mass. 02155

Gwen Blackburn
233 Arlington Street
Medford, Mass. 02155

Phyllis Bucco-Nataro
28 Traincroft St.
Medford, Mass. 02155

Mary Briley
106 Alexander Avenue
Medford, Mass. 02155

Ann Marie Clinton
11 Norton Ave.
Medford, Mass. 02155

Carol Colangelo
107 Willis Avenue
Medford, Mass. 02155

Dan Colangelo
107 Willis Avenue
Medford, Mass. 02155

Rita Donnelly
35 Charnwood Street
Medford, Mass. 02155

Alva Erickson
103 Willis Avenue
Medford, Mass. 02155

Bernard Green
608 Main Street
Medford, Mass. 02155
Chairman of the Medford Republican Party

Robert Kangas
76 Orchard Street
Medford, Mass. 02155

John Keating
31 Cushing Street
Medford, Mass. 02155

Susan Lennon
63 Marion Street
Medford, Mass. 02155

Jim Morse
49 Metcalf Street
Medford, Mass. 02155

Anita Nagem
9 Norton Avenue
Medford, Mass. 02155

Raymond J. Nagem
9 Norton Avenue
Medford, Mass. 02155

Attorney Bill O'Keefe
18 Kilgore Avenue
Medford, Mass. 02155

Carolyn Resendes
76 Alexander Ave.
Medford, Mass. 02155

Carolyn Rosen
25 Bussell Road
Medford, Mass. 02155

Dr. William Wood
25 Bussell Road
Medford, Mass. 02155

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would board each day at Ball Square Station. These ridership levels were determined to be sufficiently high to support a station in each location.

O-014-052

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-014-053

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Recording Secretary of the Medford Democratic Party

Groundwork SOMERVILLE

PO Box 441033
240 Elm Street, Suite B7
Somerville.MA.02144

January 8, 2010

To: Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
EEA #13886
Attn: Holly Johnson
MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181

RECEIVED
JAN 8 2010
MEPA

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Ian Bowles:

First, we would like to thank you for all of the time and energy that has gone into the Green Line Extension to Somerville and Medford up to this point. Being able to go to so many public meetings and here from officials on this topic has been incredibly important not only to our organization, but also to the Somerville community at large. Thank you again for these efforts. I am writing today to recommend that the Draft EIR be approved, with a few modifications.

Groundwork Somerville is committed to seeing this project completed on time by December 31, 2014 and does not want to stand in the way of that completion. In order for this to happen, design and construction must proceed, but in a thoughtful manner to ensure that full benefits occur from the extension. It is our belief that in order to ensure that this happens, a few critical factors must be noted.

O-015-001

First, Groundwork Somerville, along with our partners at the Community Corridor Planning Project, strongly urges a meaningful public input process. We believe that community involvement is the only way to ensure a successful Green Line extension project. A project-wide Citizens Advisory Group should be maintained throughout the entire project, including detailed design, engineering, construction and start-up phases. Smaller local advisory groups should be established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues. Additionally, MEPA should require collaborative planning, with meaningful community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work out of a centrally located field office to maximize access.

O-015-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

O-015-001 Community Corridor Planning is willing to work with state staff to assist with the creation of such advisory groups.

O-015-002 Additionally, Community Corridor Planning has a strong group of engaged residents and business owners, with our numbers soaring recently to 700. Our Advisory Team recently led an interactive community meeting where 11 Core Principles to land use planning regarding the Green Line Extension were ratified by over 300 residents. We strongly encourage MassDOT and MEPA to examine and utilize these principles in all development.

O-015-003 Groundwork Somerville is in strong opposition to the Maintenance Facility site at Yard 8. We strongly urge you to eliminate this Option and to require Mass DOT to carry out a full analysis of the Option L alternatives and Option H for siting the Maintenance Facility. While not perfect, these other two options have much more support in the Somerville and Cambridge communities. Yard 8 is opposed by the cities of Somerville and Cambridge and has been vocally rebuked by community residents and business owners at numerous public meetings. It would impose an onerous transportation infrastructure burden on the city that would negatively impact quality of life and preclude economic development of Brick Bottom/Inner Belt. Placing such a structure in Yard 8 would not only negatively impact current residents and businesses, but it would put Somerville at a significant disadvantage for future economic development in this optimal area.

O-015-004 The Community Path must be fully integrated into the design, planning, and construction of the Green Line extension. The Path exemplifies the Federal Transit Administration's new policy on bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The DEIR should state specifically that the extension of the path will be designed by MassDOT as agreed to in February of 2009. It is also essential that the Community Path and the Green Line extensions be built as one project.

O-015-005 The Mystic Valley Parkway / Route 16 terminus should be designed and constructed at the same time as the rest of the project.

O-015-006 Track design and construction should enable adding future stations – between Lechmere and Washington Street/Union Square, between College Avenue and Route 16, and along a future Green Line extension from Union Square to Porter Square that could serve both Cambridge and Somerville neighborhoods.

O-015-007 Green Line station designs should effectively accommodate bus drop off and pick-up with much attention given to the ease of intermodal connections. Bus routes in Somerville must be aligned to optimize connections to Green Line stations simultaneous to the start of Green Line service. Community input must be gathered regarding the re-routing of bus lines and bus stops before this can happen.

O-015-008 The number of bike racks currently proposed does not meet the needs of the community. The number of riders in and around Somerville, and the increase in riders due to closer proximity to the new T stops, will increase necessitate even more bike racks than we are utilizing in Davis (which, even with their large numbers, are not sufficient). Additionally, all

O-015-002

MassDOT has reviewed and considered the "Core Community Principles" for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

O-015-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-015-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the

O-015-008 stations should be designed so as to encourage walking and should not impede pedestrian access. An important pedestrian access way will be the Community Path, and thus this infrastructure should be planned for well.

O-015-009 Lastly, it is imperative that the DEIR state clearly how the Maintenance Facility, Storage areas and stations will be sustainable structures. It is our belief that the environmental impact of extending the Green Line should also encompass the use of "green" technology that can be included in the construction of these new structures. This should include creating green roofs on all storage facilities, and utilizing renewable energy technology to power the buildings. Such technology, especially green roofs, will add insulation, sound proofing, mitigate stormwater issues and decrease the urban heat island effect, not to mention add to the asthetics of the area. One final note on creating green structures, the act of jumping on the "green revolution" bandwagon will also allow for a certain degree of bragging rights by the state and the MBTA. Let us be leaders for the Commonwealth, and maybe even the country in this regard.

Thank you for taking the time to listen to the concerns of Groundwork Somerville.

Sincerely,

Nancy E Bernhard

Nancy Bernhard
President, Board of Directors
Groundwork Somerville

City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-015-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-015-006

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-015-007

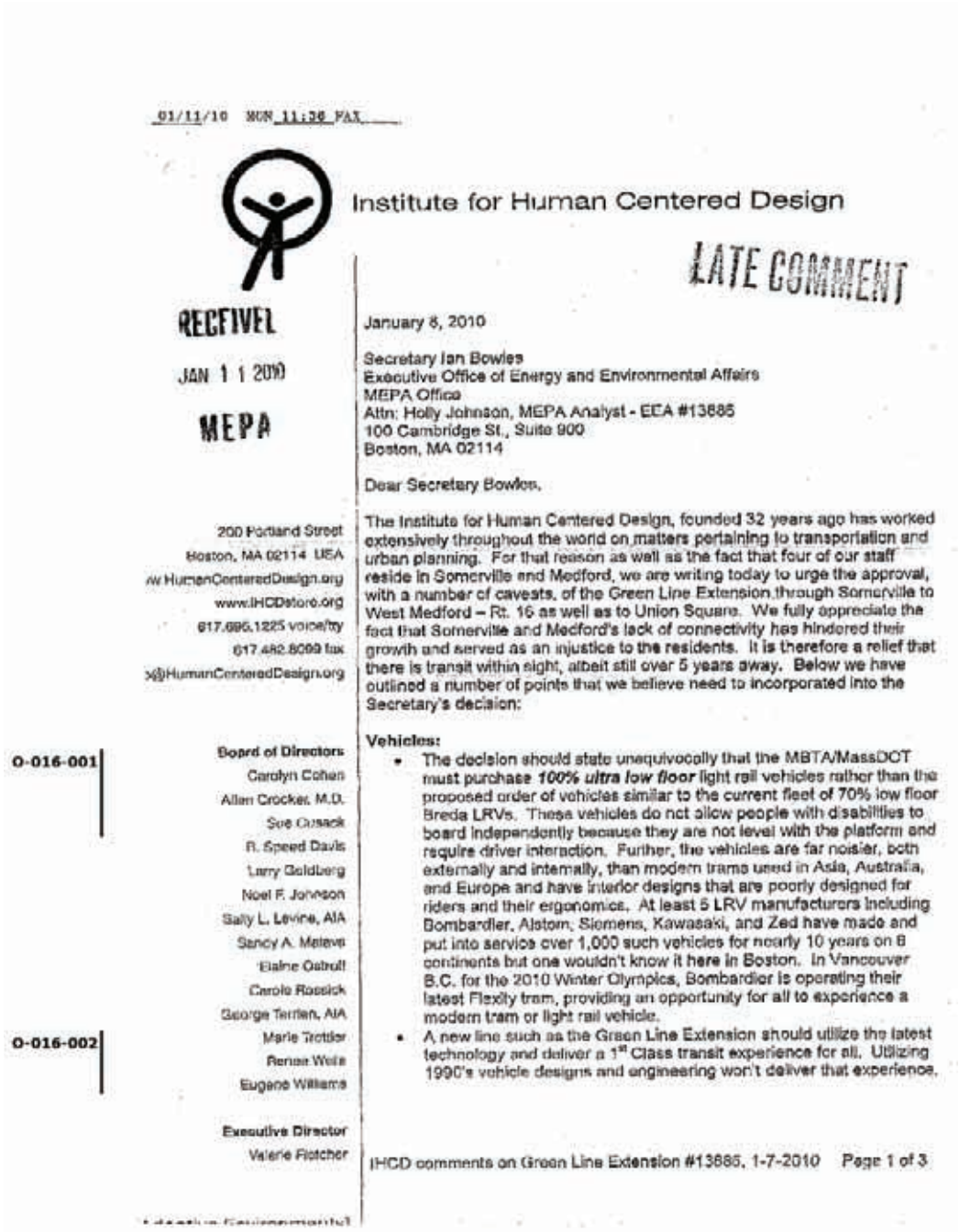
To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-015-008

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-015-009

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual designs. Detailed designs for each station, the maintenance facility, and the entire Project will be refined during the preliminary engineering phase. As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR.



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Institute for Human Centered Design

LATE COMMENT

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JAN 11 2010

MEPA

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst - EEA #13685
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles,

200 Portland Street
Boston, MA 02114 USA
www.HumanCenteredDesign.org
www.IHCDstore.org
617.695.1225 voice/tty
617.482.8099 fax
info@HumanCenteredDesign.org

The Institute for Human Centered Design, founded 32 years ago has worked extensively throughout the world on matters pertaining to transportation and urban planning. For that reason as well as the fact that four of our staff reside in Somerville and Medford, we are writing today to urge the approval, with a number of caveats, of the Green Line Extension through Somerville to West Medford – Rt. 16 as well as to Union Square. We fully appreciate the fact that Somerville and Medford's lack of connectivity has hindered their growth and served as an injustice to the residents. It is therefore a relief that there is transit within sight, albeit still over 5 years away. Below we have outlined a number of points that we believe need to incorporated into the Secretary's decision:

Vehicles:

- The decision should state unequivocally that the MBTA/MassDOT must purchase ***100% ultra low floor*** light rail vehicles rather than the proposed order of vehicles similar to the current fleet of 70% low floor Breda LRVs. These vehicles do not allow people with disabilities to board independently because they are not level with the platform and require driver interaction. Further, the vehicles are far noisier, both externally and internally, than modern trams used in Asia, Australia, and Europe and have interior designs that are poorly designed for riders and their ergonomics. At least 5 LRV manufacturers including Bombardier, Alstom, Siemens, Kawasaki, and Zed have made and put into service over 1,000 such vehicles for nearly 10 years on 6 continents but one wouldn't know it here in Boston. In Vancouver B.C. for the 2010 Winter Olympics, Bombardier is operating their latest Flexity tram, providing an opportunity for all to experience a modern tram or light rail vehicle.
- A new line such as the Green Line Extension should utilize the latest technology and deliver a 1st Class transit experience for all. Utilizing 1990's vehicle designs and engineering won't deliver that experience.

Board of Directors
Carolyn Cohen
Allen Crocker, M.D.
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R. Speed Davis
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Sally L. Levine, AIA
Nancy A. Mateve
Elaine Ostroff
Carole Rosslck
George Terrien, AIA
Marie Trottier
Renae Wells
Eugene Williams

Executive Director
Valerie Fletcher

O-016-001

MBTA will procure new light rail vehicles as part of the Green Line Extension. These vehicles are anticipated to be 70% low floor, similar to the existing Type 8 vehicles. Renderings for these vehicles are available on the Project website at http://www.greenlineextension.org/currentmaterials.asp?area=mls.

O-016-002

MBTA will procure new light rail vehicles to operate as part of the Green Line Extension Project. Renderings for these vehicles are available on the Project website at http://www.greenlineextension.org/currentmaterials.asp?area=mls.

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Institute for Human Centered Design

For an example of how modern ultra low floor light rail vehicles and excellent station design can facilitate a comfortable experience for all riders, please see our case study at www.universaldesigncasestudies.org/ and take a look at the Bordeaux case study.

Stations:

O-016-003

- Each Green Line Extension station should first and foremost be designed to serve and encourage riders who come by foot, bicycle, and bus. Car access should be secondary in consideration.
- Stations should be accessed at both ends, provide redundant elevators if elevators are required, clearly defined and sheltered waiting areas (ideally enclosed with heat) and ample perches and benches for people to rest upon.
- At street and platform levels, riders should be provided both audio and visual messages about the real time status of the next train: e.g. 2 minutes away.
- Transfers to buses should occur as close to the station entrance as possible.
- Sheltered bicycle parking should be provided at each station.
- Public art should be incorporated into the station designs, not only at the entrances but also at the platforms.

Connectivity:

O-016-004

- First and foremost, the location of the line termini at West Medford and Union Square should not in anyway inhibit future extensions of these lines. It is critical that the Commonwealth choose locations and designs that eliminate potential roadblocks to expansion because it is far cheaper to be proactive now rather than relocate infrastructure later.
- In the case of Union Square, the Secretary's decision should specifically require that the Project relocate part of the station or the NStar substation that effectively blocks future extension to Porter Square. Further, the decision should require MassDOT to commence a feasibility analysis for the extension to Porter and study both a Somerville Ave alignment as well as within the existing MBTA ROW.
- The project should include a transfer station to enable residents who want to go from Union Sq to Medford Hillside without having to go all the way to Lechmere. Third, the project should be required to analyze and propose improvements as well as consolidations to existing bus routes within both Somerville and Medford.

O-016-005

O-016-006

- Fourth, as part of the decision, MassDOT should be required to commence planning and design for the dismantling of the McGrath highway and its transformation into a boulevard that re-knits Somerville by encouraging pedestrians and bicycling along and across it.

O-016-007

- Finally, the Community Path project should be fully integrated within the design of the Green Line Extension and built by the project, preferably during initial construction phases.

[positive environments]

O-016-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

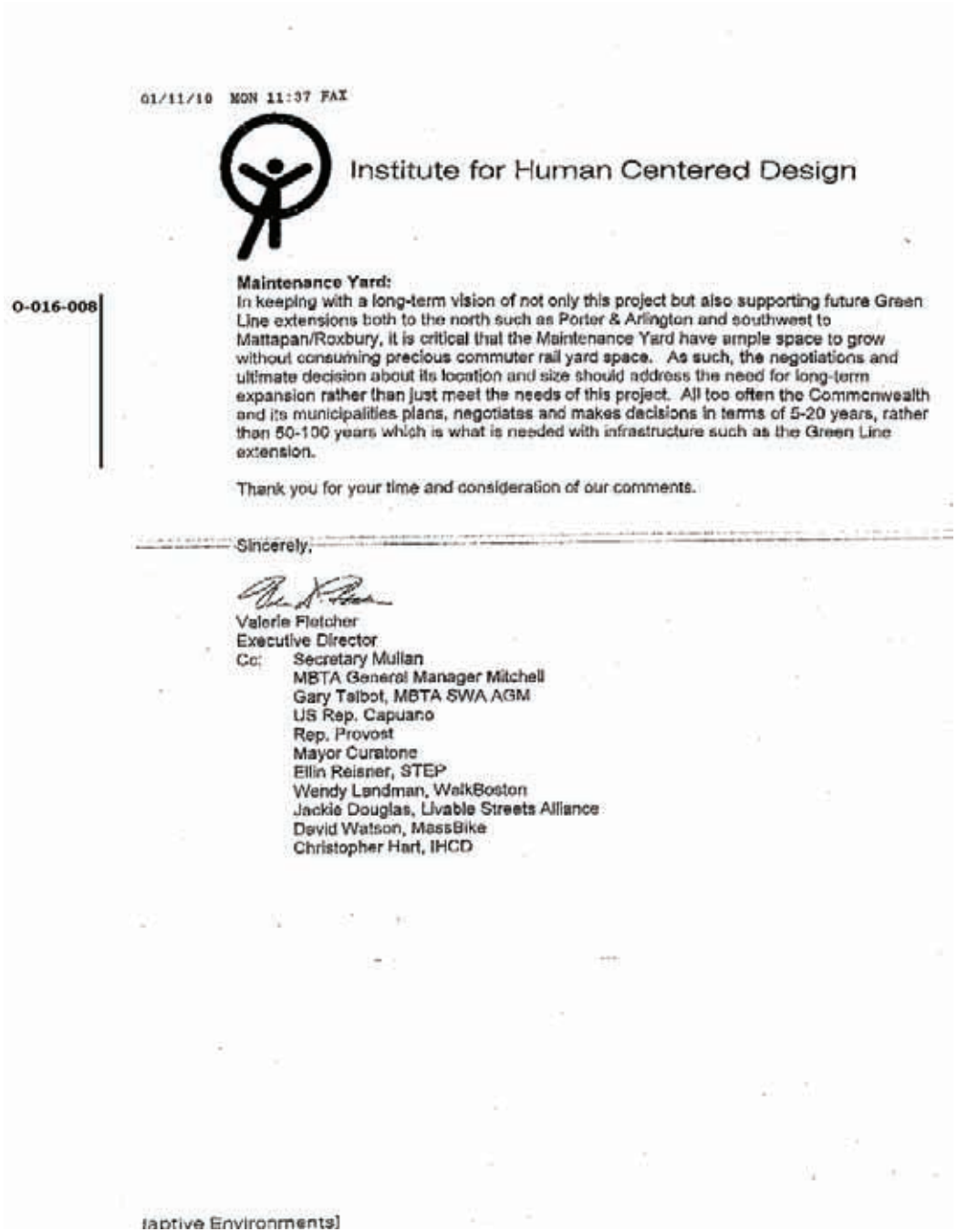
In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-016-004

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-016-005

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the



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Institute for Human Centered Design

O-016-008

Maintenance Yard:
In keeping with a long-term vision of not only this project but also supporting future Green Line extensions both to the north such as Porter & Arlington and southwest to Mattapan/Roxbury, it is critical that the Maintenance Yard have ample space to grow without consuming precious commuter rail yard space. As such, the negotiations and ultimate decision about its location and size should address the need for long-term expansion rather than just meet the needs of this project. All too often the Commonwealth and its municipalities plans, negotiates and makes decisions in terms of 5-20 years, rather than 50-100 years which is what is needed with infrastructure such as the Green Line extension.

Thank you for your time and consideration of our comments.

Sincerely,

Valerie Fletcher
Executive Director
Cc: Secretary Mullan
MBTA General Manager Mitchell
Gary Talbot, MBTA SWA AGM
US Rep. Capuano
Rep. Provost
Mayor Curatone
Ellin Reisner, STEP
Wendy Landman, WalkBoston
Jackie Douglas, Livable Streets Alliance
David Watson, MassBike
Christopher Hart, IHCD

[aptive Environments]

FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-016-006

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

O-016-007

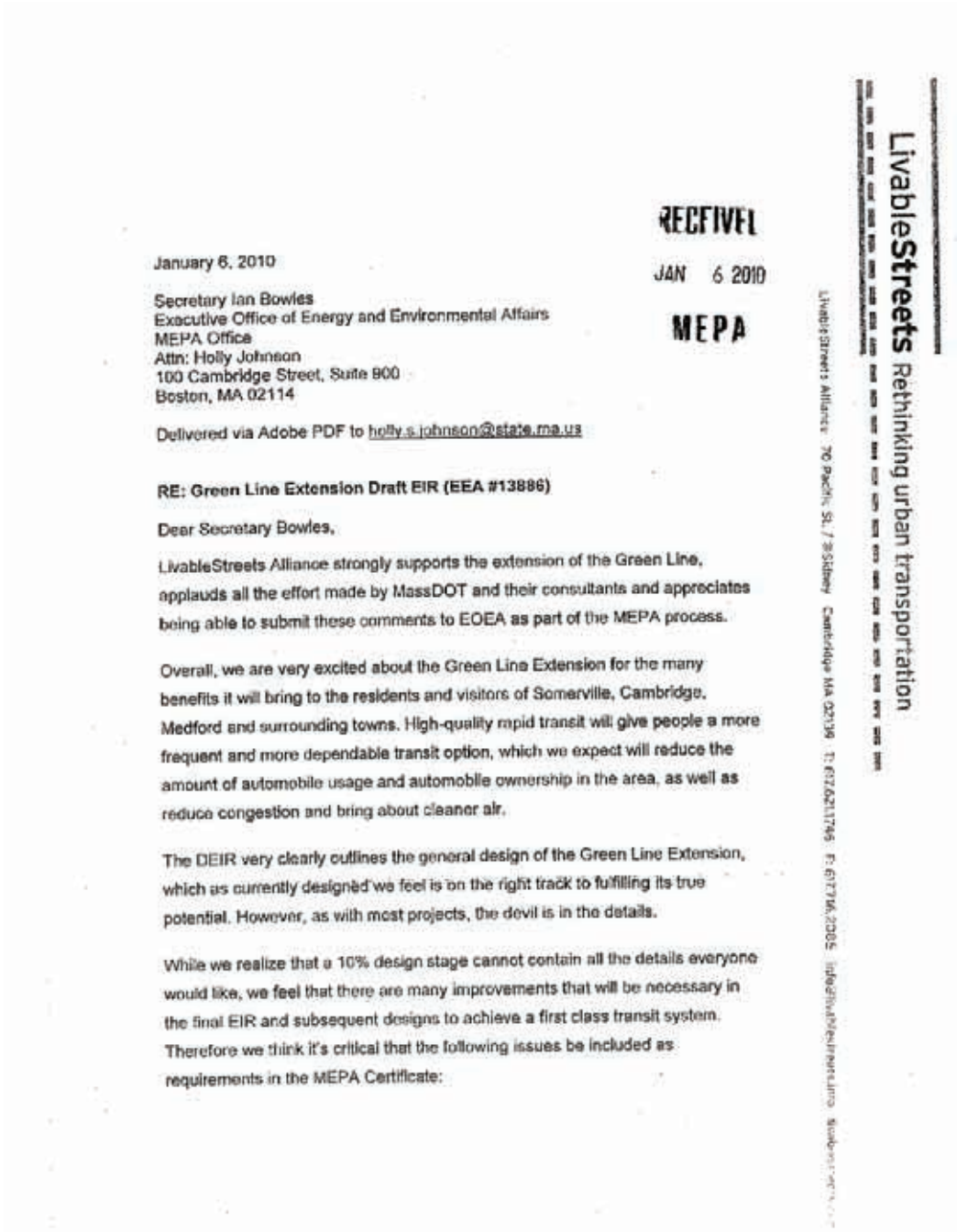
MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-016-008

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for

Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.



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JAN 6 2010

MEPA

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson
100 Cambridge Street, Suite 900
Boston, MA 02114

Delivered via Adobe PDF to holly.s.johnson@state.ma.us

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,

LivableStreets Alliance strongly supports the extension of the Green Line, applauds all the effort made by MassDOT and their consultants and appreciates being able to submit these comments to EOEA as part of the MEPA process.

Overall, we are very excited about the Green Line Extension for the many benefits it will bring to the residents and visitors of Somerville, Cambridge, Medford and surrounding towns. High-quality rapid transit will give people a more frequent and more dependable transit option, which we expect will reduce the amount of automobile usage and automobile ownership in the area, as well as reduce congestion and bring about cleaner air.

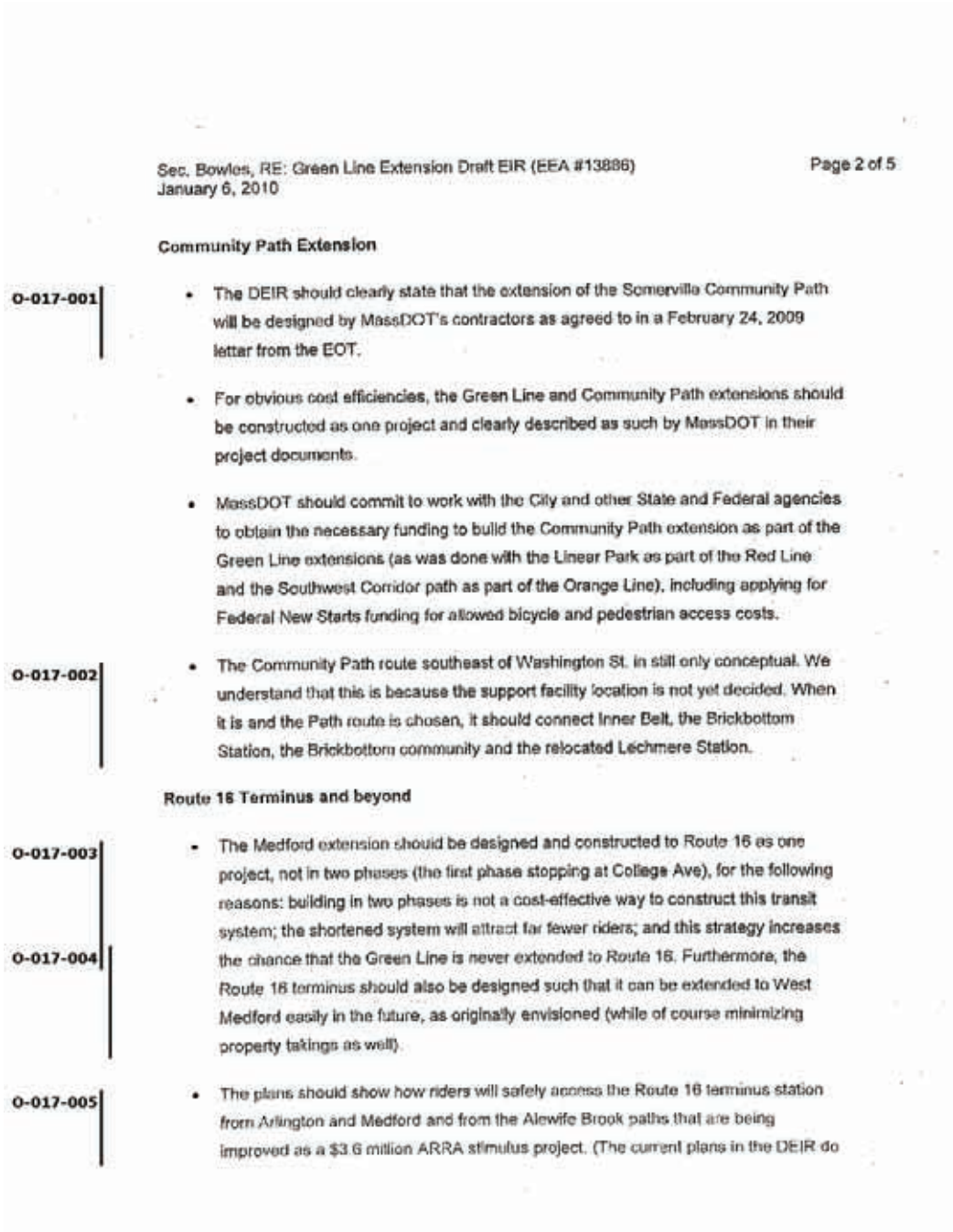
The DEIR very clearly outlines the general design of the Green Line Extension, which as currently designed we feel is on the right track to fulfilling its true potential. However, as with most projects, the devil is in the details.

While we realize that a 10% design stage cannot contain all the details everyone would like, we feel that there are many improvements that will be necessary in the final EIR and subsequent designs to achieve a first class transit system. Therefore we think it's critical that the following issues be included as requirements in the MEPA Certificate:

LivableStreets Alliance

Livable**Streets** Rethinking urban transportation

LivableStreets Alliance 70 Pacific St. / 3rd Sidney Cambridge MA 02139 T: 617.621.1745 F: 617.864.2085 info@livablestreets.com



Sec. Bowles, RE: Green Line Extension Draft EIR (EEA #13886) Page 2 of 5
January 6, 2010

Community Path Extension

O-017-001
- The DEIR should clearly state that the extension of the Somerville Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT.
- For obvious cost efficiencies, the Green Line and Community Path extensions should be constructed as one project and clearly described as such by MassDOT in their project documents.
- MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding for allowed bicycle and pedestrian access costs.

O-017-002
- The Community Path route southeast of Washington St. is still only conceptual. We understand that this is because the support facility location is not yet decided. When it is and the Path route is chosen, it should connect Inner Belt, the Brickbottom Station, the Brickbottom community and the relocated Lechmere Station.

Route 16 Terminus and beyond

O-017-003
- The Medford extension should be designed and constructed to Route 16 as one project, not in two phases (the first phase stopping at College Ave), for the following reasons: building in two phases is not a cost-effective way to construct this transit system; the shortened system will attract far fewer riders; and this strategy increases

O-017-004
the chance that the Green Line is never extended to Route 16. Furthermore, the Route 16 terminus should also be designed such that it can be extended to West Medford easily in the future, as originally envisioned (while of course minimizing property takings as well).

O-017-005
- The plans should show how riders will safely access the Route 16 terminus station from Arlington and Medford and from the Alewife Brook paths that are being improved as a $3.6 million ARRA stimulus project. (The current plans in the DEIR do

O-017-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-017-002

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-017-003

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will

O-017-005 not show this.) Safe routes for pedestrians and bicyclists should be shown from the west side of Route 16.

O-017-006
- A multi-use path should be designed and constructed as part of or parallel with the Green Line Extension project from the Route 16 Station to the West Medford Commuter Rail Station. This is a distance that is easily walkable in 5-10 minutes if there was a direct connection between the two stations, and would allow for commuter rail to rapid transit transfer, and vice versa, boosting the ridership of both transit lines.

Union Square Terminus and beyond

O-017-007
- The Union Square terminus should be designed such that it can be extended to Porter Square easily in the future.

Pedestrian Access

O-017-008
- Pedestrian access could be improved at some of the stations by having more than one entrance or access point (such as a direct connection from the Gilman Square station to the Somerville High School/Library/City Hall complex). The Brickbottom Station design seems particularly poor in this regard for riders coming from the west and north.
- The location of drop-offs (kiss and rides), in particular at College Ave. and Brickbottom stations are directly in front of the entrance where pedestrian access is most important and requires vehicles to cross over the sidewalk at two locations. Pedestrian (and bicycle) access should be given higher priority than these motor vehicles connections. A drop-off zone along the street itself would be more appropriate and would not invade on the pedestrian space.

O-017-009
- Improvements for pedestrian access in general should be further studied, particularly the placement of crosswalks at the most desirable crossing points as well as the widening of sidewalks and addition of traffic calming measures such as curb extensions and raised crosswalks where possible. In particular, the crossing of McGrath Highway to reach the relocated Lechmere Station is an area of particular

require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-017-004

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-017-005

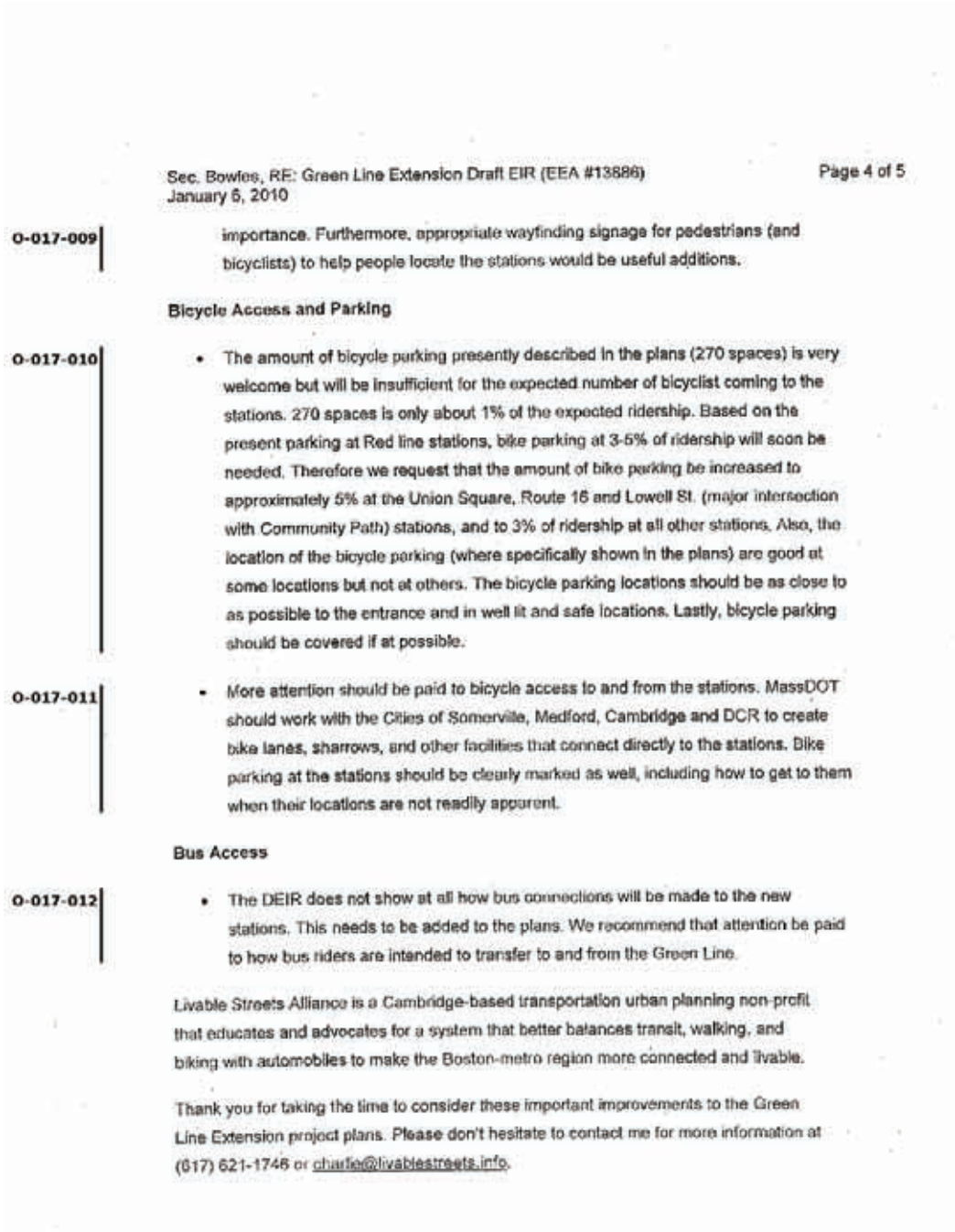
A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-017-006

Please see response to Comment O-017-005.

O-017-007

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.



Sec. Bowles, RE: Green Line Extension Draft EIR (EEA #13886) Page 4 of 5
January 6, 2010

O-017-009 importance. Furthermore, appropriate wayfinding signage for pedestrians (and bicyclists) to help people locate the stations would be useful additions.

Bicycle Access and Parking

O-017-010
- The amount of bicycle parking presently described in the plans (270 spaces) is very welcome but will be insufficient for the expected number of bicyclist coming to the stations. 270 spaces is only about 1% of the expected ridership. Based on the present parking at Red line stations, bike parking at 3-5% of ridership will soon be needed. Therefore we request that the amount of bike parking be increased to approximately 5% at the Union Square, Route 16 and Lowell St. (major intersection with Community Path) stations, and to 3% of ridership at all other stations. Also, the location of the bicycle parking (where specifically shown in the plans) are good at some locations but not at others. The bicycle parking locations should be as close to as possible to the entrance and in well lit and safe locations. Lastly, bicycle parking should be covered if at possible.

O-017-011
- More attention should be paid to bicycle access to and from the stations. MassDOT should work with the Cities of Somerville, Medford, Cambridge and DCR to create bike lanes, sharrows, and other facilities that connect directly to the stations. Bike parking at the stations should be clearly marked as well, including how to get to them when their locations are not readily apparent.

Bus Access

O-017-012
- The DEIR does not show at all how bus connections will be made to the new stations. This needs to be added to the plans. We recommend that attention be paid to how bus riders are intended to transfer to and from the Green Line.

Livable Streets Alliance is a Cambridge-based transportation urban planning non-profit that educates and advocates for a system that better balances transit, walking, and biking with automobiles to make the Boston-metro region more connected and livable.

Thank you for taking the time to consider these important improvements to the Green Line Extension project plans. Please don't hesitate to contact me for more information at (617) 621-1746 or charlie@livablestreets.info.

O-017-008

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-017-009

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

O-017-010

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the

Sincerely,

Charlie Denison

Charlie Denison
Board Member & Director of Advocacy

CC:
Jeffrey Mullan, CEO, MassDOT <jeffrey.mullan@state.ma.us>
Mayor Joseph Curtatone, Somerville <mayor@somervillema.gov>
Mayor Michael J. McGlynn, Medford <mayor@medford.org>
The Somerville delegation:
-- Sen. Pat Jehlen <patricia.jehlen@state.ma.us>
-- Rep. Denise Provost <rep.denisеprovost@hou.state.ma.us>
-- Rep. Carl Sciortino <rep.carlsciortino@hou.state.ma.us>
-- Rep. Tim Toomey <rep.timothytoomey@hou.state.ma.us>
The Medford delegation:
-- Sen. Sean Garballey <sean.garballey@state.ma.us>
-- Rep. Paul Donato <rep.pauldonato@hou.state.ma.us>

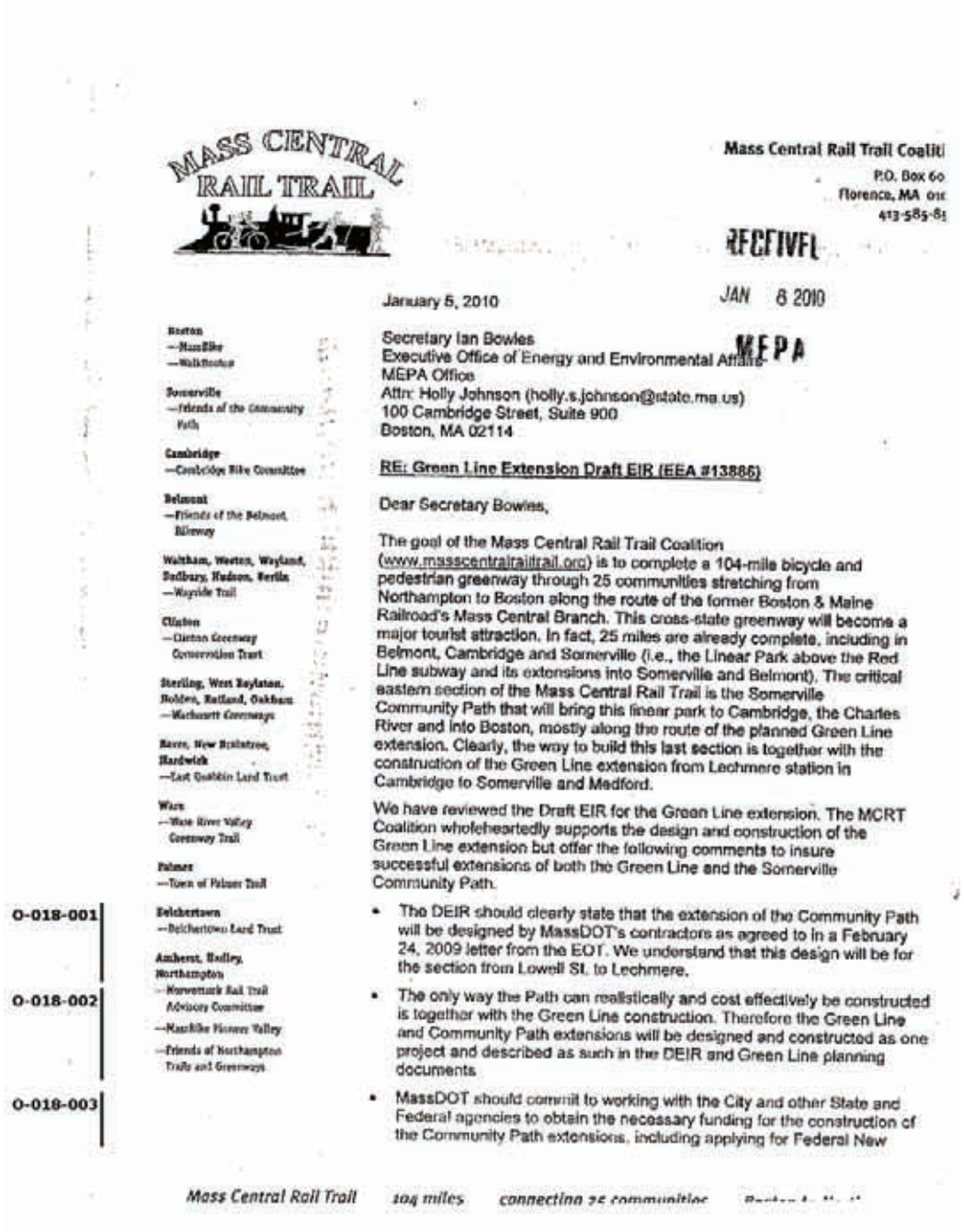
methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-017-011

Please see response to Comment O-017-009.

O-017-012

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.



MASS CENTRAL RAIL TRAIL

Mass Central Rail Trail Coaliti
P.O. Box 60
Florence, MA 01
413-585-8

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January 5, 2010

Boston
—MassBike
—WalkBoston

Somerville
—Friends of the Community Path

Cambridge
—Cambridge Bike Committee

Belmont
—Friends of the Belmont Bikeway

Waltham, Weston, Wayland, Sudbury, Hudson, Berlin
—Wayside Trail

Clinton
—Clinton Greenway Conservation Trust

Sterling, West Boylston, Holden, Rutland, Oakham
—Wachusett Greenways

Bayer, New Braintree, Hardwick
—East Quabbin Land Trust

Ware
—Ware River Valley Greenway Trail

Palmer
—Town of Palmer Trail

Belchertown
—Belchertown Land Trust

Amherst, Hadley, Northampton
—Norwottuck Rail Trail Advisory Committee
—MassBike Pioneer Valley
—Friends of Northampton Trails and Greenways

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,

The goal of the Mass Central Rail Trail Coalition (www.masscentralrailtrail.org) is to complete a 104-mile bicycle and pedestrian greenway through 25 communities stretching from Northampton to Boston along the route of the former Boston & Maine Railroad's Mass Central Branch. This cross-state greenway will become a major tourist attraction. In fact, 25 miles are already complete, including in Belmont, Cambridge and Somerville (i.e., the Linear Park above the Red Line subway and its extensions into Somerville and Belmont). The critical eastern section of the Mass Central Rail Trail is the Somerville Community Path that will bring this linear park to Cambridge, the Charles River and into Boston, mostly along the route of the planned Green Line extension. Clearly, the way to build this last section is together with the construction of the Green Line extension from Lechmere station in Cambridge to Somerville and Medford.

We have reviewed the Draft EIR for the Green Line extension. The MCRT Coalition wholeheartedly supports the design and construction of the Green Line extension but offer the following comments to insure successful extensions of both the Green Line and the Somerville Community Path.

O-018-001 • The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT. We understand that this design will be for the section from Lowell St. to Lechmere.

O-018-002 • The only way the Path can realistically and cost effectively be constructed is together with the Green Line construction. Therefore the Green Line and Community Path extensions will be designed and constructed as one project and described as such in the DEIR and Green Line planning documents.

O-018-003 • MassDOT should commit to working with the City and other State and Federal agencies to obtain the necessary funding for the construction of the Community Path extensions, including applying for Federal New

Mass Central Rail Trail *104 miles* *connecting 25 communities*

O-018-001

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-018-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-018-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the

O-018-003

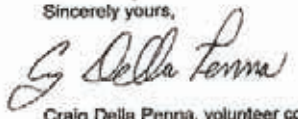
- Starts funding for applicable costs (The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop ... may be eligible for FTA funding: http://edocket.access.gpo.gov/2009/E8-27240.htm)

There are many other reasons why these requests are reasonable and appropriate in addition to the goal of completing the eastern end of the Mass Central Rail Trail:

- The Somerville Community Path will provide desirable off-road bicycle and pedestrian access to the stations, offering superior connections to the neighborhoods (like in Davis Sq.), thereby attracting more riders in a very cost-effective manner.
- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is in integral part of the station access.
- There are at least 2 precedents in the Boston area for community paths constructed and paid for by transit projects:
  - The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
  - The Southwest Corridor Path alongside and over the Orange Line

Thank you very much for considering these comments for the extension of the Green Line relative to the Somerville Community Path.

Sincerely yours,



Craig Della Penna, volunteer coordinator
Mass Central Rail Trail Coalition

City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

MGNA
Medford Green Line Neighborhood Alliance
www.medfordgreenline.org
info@medfordgreenline.org

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MEPA

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

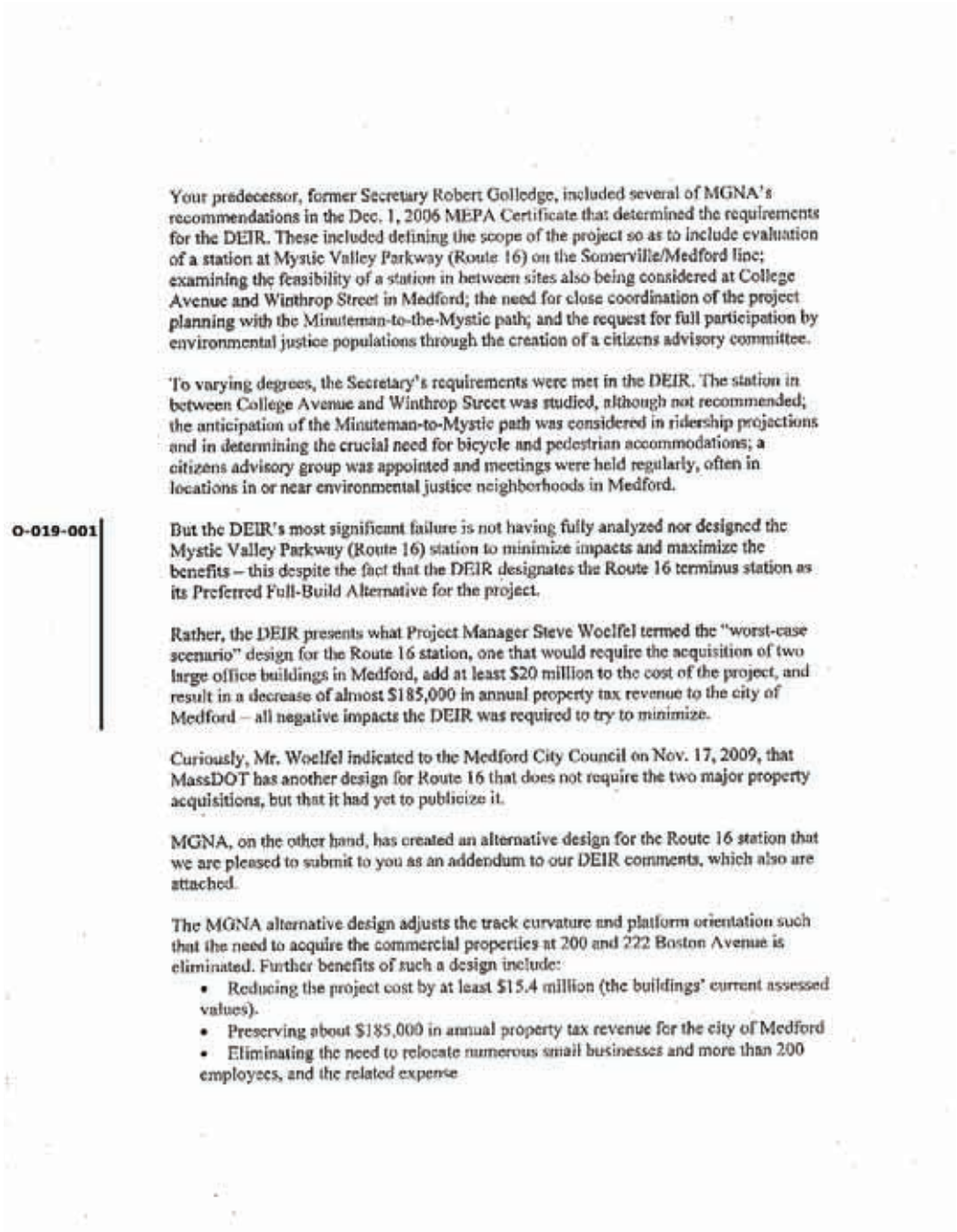
The Medford Green Line Neighborhood Alliance (MGNA) once again welcomes the opportunity present comments on the Green Line extension project, in this case regarding the Draft Environmental Impact Report (EEA #138860).

The MGNA is a group of citizens who support the proposed Green Line extension to Medford, and who advocate for proactive involvement from the city, its residents and all stakeholders to ensure that the extension is completed in a manner that is most beneficial to the community.

MGNA views the Green Line extension as a historic opportunity for Medford residents, businesses and institutions to gain a major improvement to the region's transportation infrastructure that will serve the community well for decades. Executed properly and carefully, the Green Line will provide thousands of Medford residents with an efficient, environmentally friendly alternative to automobile use; provide better access to employment, cultural, educational and health care opportunities; improve air quality; and make Medford overall a better place to live, work and visit.

For the past four years, MGNA has been actively reaching out to all segments of the community to encourage active participation in the planning process – whether individually, as part of a neighborhood or constituency group, or as part of our alliance – and also striving to become more informed itself about the many complex issues that this project comprises.

We have conducted dozens of meetings and workshops; conducted outreach inviting civic participation; distributed informational material; and prepared two Station Study reports assessing all factors related to the Green Line extension in Medford.



Your predecessor, former Secretary Robert Golledge, included several of MGNA's recommendations in the Dec. 1, 2006 MEPA Certificate that determined the requirements for the DEIR. These included defining the scope of the project so as to include evaluation of a station at Mystic Valley Parkway (Route 16) on the Somerville/Medford line; examining the feasibility of a station in between sites also being considered at College Avenue and Winthrop Street in Medford; the need for close coordination of the project planning with the Minuteman-to-the-Mystic path; and the request for full participation by environmental justice populations through the creation of a citizens advisory committee.

To varying degrees, the Secretary's requirements were met in the DEIR. The station in between College Avenue and Winthrop Street was studied, although not recommended; the anticipation of the Minuteman-to-Mystic path was considered in ridership projections and in determining the crucial need for bicycle and pedestrian accommodations; a citizens advisory group was appointed and meetings were held regularly, often in locations in or near environmental justice neighborhoods in Medford.

O-019-001

But the DEIR's most significant failure is not having fully analyzed nor designed the Mystic Valley Parkway (Route 16) station to minimize impacts and maximize the benefits – this despite the fact that the DEIR designates the Route 16 terminus station as its Preferred Full-Build Alternative for the project.

Rather, the DEIR presents what Project Manager Steve Woelfel termed the "worst-case scenario" design for the Route 16 station, one that would require the acquisition of two large office buildings in Medford, add at least $20 million to the cost of the project, and result in a decrease of almost $185,000 in annual property tax revenue to the city of Medford – all negative impacts the DEIR was required to try to minimize.

Curiously, Mr. Woelfel indicated to the Medford City Council on Nov. 17, 2009, that MassDOT has another design for Route 16 that does not require the two major property acquisitions, but that it had yet to publicize it.

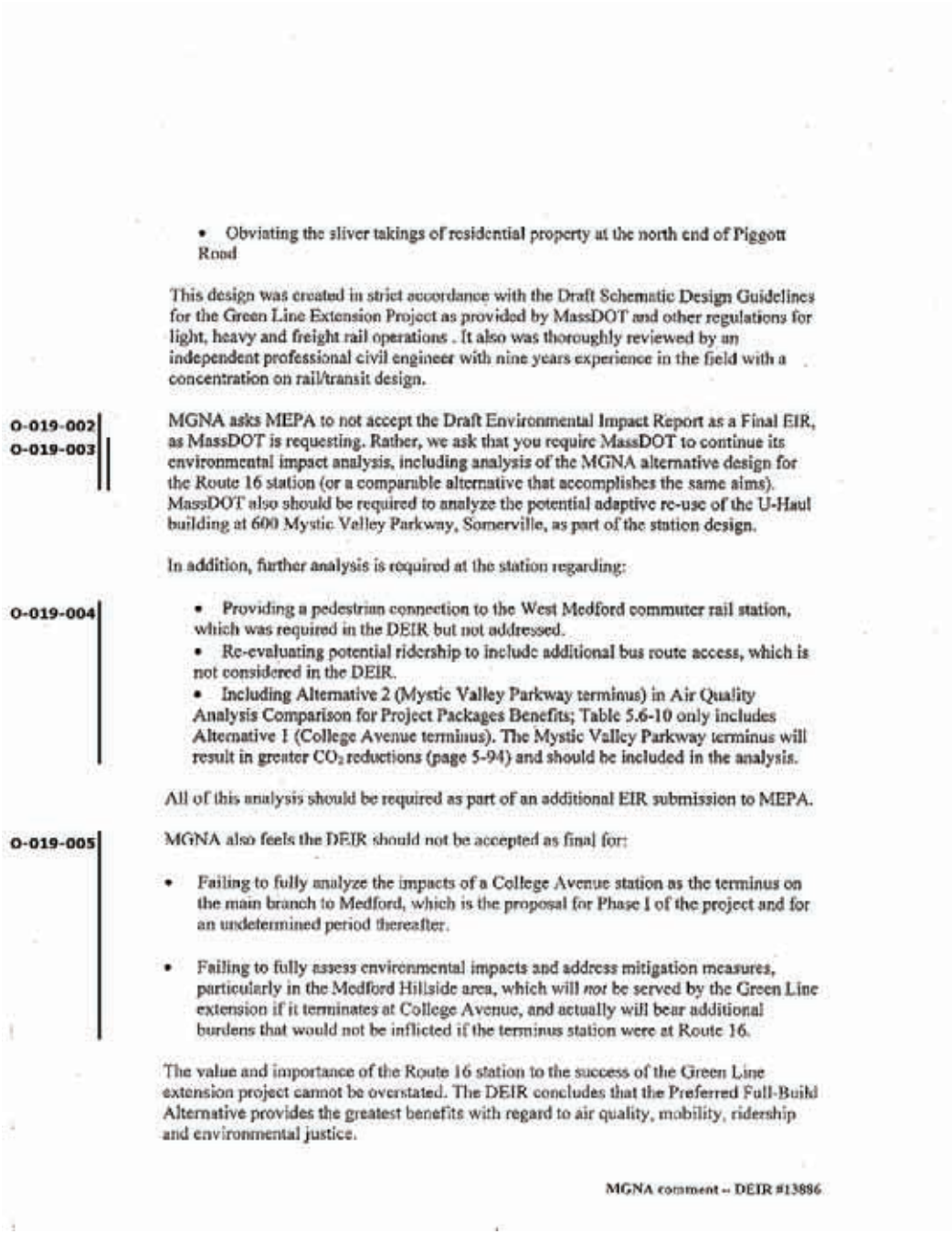
MGNA, on the other hand, has created an alternative design for the Route 16 station that we are pleased to submit to you as an addendum to our DEIR comments, which also are attached.

The MGNA alternative design adjusts the track curvature and platform orientation such that the need to acquire the commercial properties at 200 and 222 Boston Avenue is eliminated. Further benefits of such a design include:

- Reducing the project cost by at least $15.4 million (the buildings' current assessed values).
- Preserving about $185,000 in annual property tax revenue for the city of Medford
- Eliminating the need to relocate numerous small businesses and more than 200 employees, and the related expense

O-019-001

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



• Obviating the sliver takings of residential property at the north end of Piggott Road

This design was created in strict accordance with the Draft Schematic Design Guidelines for the Green Line Extension Project as provided by MassDOT and other regulations for light, heavy and freight rail operations . It also was thoroughly reviewed by an independent professional civil engineer with nine years experience in the field with a concentration on rail/transit design.

O-019-002
O-019-003

MGNA asks MEPA to not accept the Draft Environmental Impact Report as a Final EIR, as MassDOT is requesting. Rather, we ask that you require MassDOT to continue its environmental impact analysis, including analysis of the MGNA alternative design for the Route 16 station (or a comparable alternative that accomplishes the same aims). MassDOT also should be required to analyze the potential adaptive re-use of the U-Haul building at 600 Mystic Valley Parkway, Somerville, as part of the station design.

In addition, further analysis is required at the station regarding:

O-019-004

- Providing a pedestrian connection to the West Medford commuter rail station, which was required in the DEIR but not addressed.
- Re-evaluating potential ridership to include additional bus route access, which is not considered in the DEIR.
- Including Alternative 2 (Mystic Valley Parkway terminus) in Air Quality Analysis Comparison for Project Packages Benefits; Table 5.6-10 only includes Alternative 1 (College Avenue terminus). The Mystic Valley Parkway terminus will result in greater CO_2 reductions (page 5-94) and should be included in the analysis.

All of this analysis should be required as part of an additional EIR submission to MEPA.

O-019-005

MGNA also feels the DEIR should not be accepted as final for:

- Failing to fully analyze the impacts of a College Avenue station as the terminus on the main branch to Medford, which is the proposal for Phase I of the project and for an undetermined period thereafter.

- Failing to fully assess environmental impacts and address mitigation measures, particularly in the Medford Hillside area, which will *not* be served by the Green Line extension if it terminates at College Avenue, and actually will bear additional burdens that would not be inflicted if the terminus station were at Route 16.

The value and importance of the Route 16 station to the success of the Green Line extension project cannot be overstated. The DEIR concludes that the Preferred Full-Build Alternative provides the greatest benefits with regard to air quality, mobility, ridership and environmental justice.

MGNA comment – DEIR #13886

O-019-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-019-003

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-019-004

At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-019-005

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch.

Last November, outgoing Secretary of Transportation James A. Aloisi reiterated his strong support for the Route 16 terminus station:

"The Green Line extension is a lost opportunity without the clear and unequivocal commitment of extending the line to Route 16," Aloisi wrote to Governor Deval Patrick.

Speaking at a sendoff event that same week, Aloisi said, "'I'm very clear that the Green Line extension really doesn't make any sense unless it goes to Route 16. I think it has to go to Route 16 and we've got to find a way to make it go to Route 16."

O-019-006 Fully evaluating a "best case" scenario station design during additional environmental analysis would be a great place to start.

Thank you.

Ken Krause

Ken Krause
Medford Green Line Neighborhood Alliance
www.medfordgreenline.org

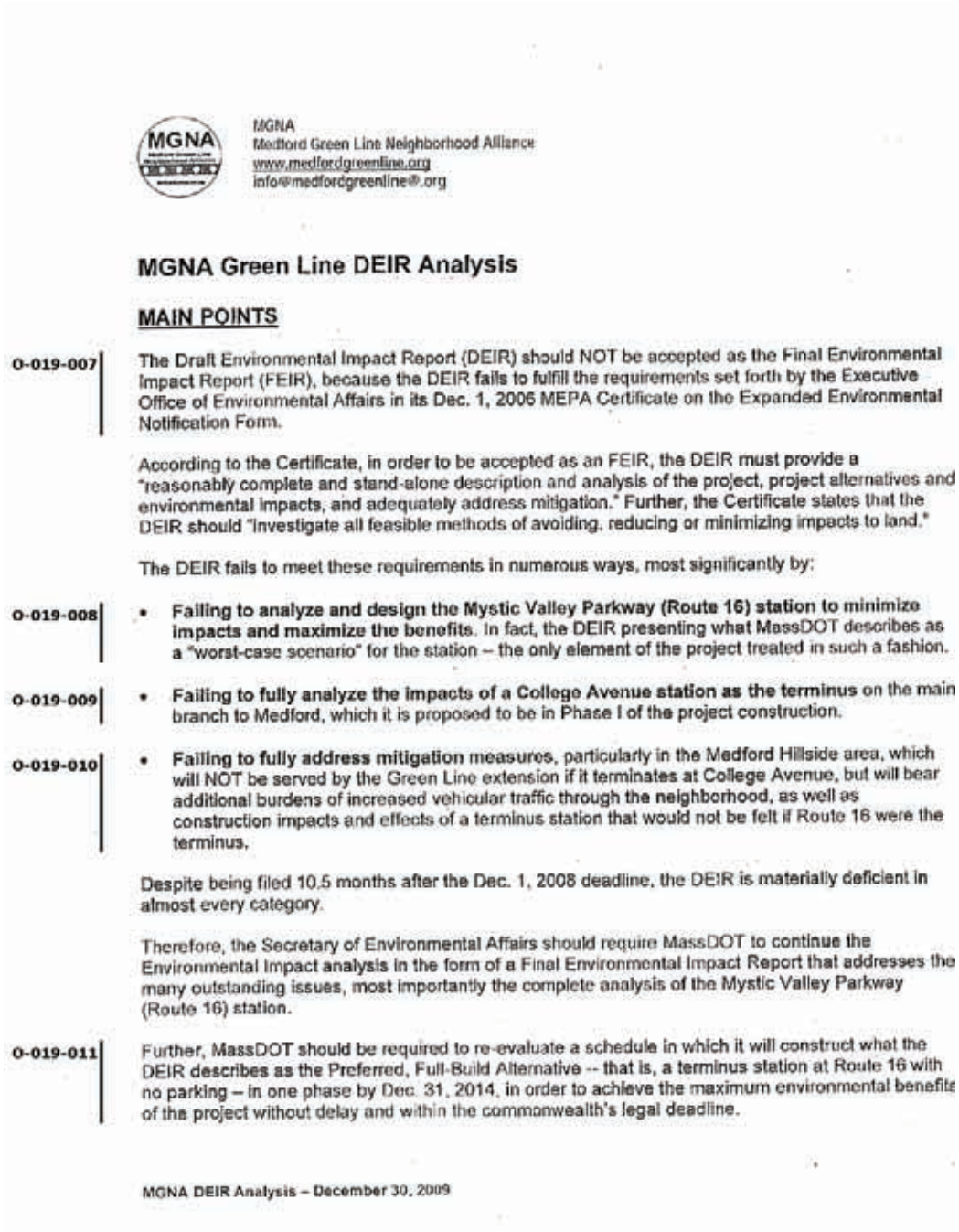
Attachments:
MGNA DEIR Analysis
MGNA Track Alignment Alternative

Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

O-019-006

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.



MGNA
Medford Green Line Neighborhood Alliance
www.medfordgreenline.org
info@medfordgreenline®.org

MGNA Green Line DEIR Analysis

MAIN POINTS

O-019-007 The Draft Environmental Impact Report (DEIR) should NOT be accepted as the Final Environmental Impact Report (FEIR), because the DEIR fails to fulfill the requirements set forth by the Executive Office of Environmental Affairs in its Dec. 1, 2006 MEPA Certificate on the Expanded Environmental Notification Form.

According to the Certificate, in order to be accepted as an FEIR, the DEIR must provide a "reasonably complete and stand-alone description and analysis of the project, project alternatives and environmental impacts, and adequately address mitigation." Further, the Certificate states that the DEIR should "investigate all feasible methods of avoiding, reducing or minimizing impacts to land."

The DEIR fails to meet these requirements in numerous ways, most significantly by:

O-019-008 • **Failing to analyze and design the Mystic Valley Parkway (Route 16) station to minimize impacts and maximize the benefits**. In fact, the DEIR presenting what MassDOT describes as a "worst-case scenario" for the station – the only element of the project treated in such a fashion.

O-019-009 • **Failing to fully analyze the impacts of a College Avenue station as the terminus** on the main branch to Medford, which it is proposed to be in Phase I of the project construction.

O-019-010 • **Failing to fully address mitigation** measures, particularly in the Medford Hillside area, which will NOT be served by the Green Line extension if it terminates at College Avenue, but will bear additional burdens of increased vehicular traffic through the neighborhood, as well as construction impacts and effects of a terminus station that would not be felt if Route 16 were the terminus.

Despite being filed 10.5 months after the Dec. 1, 2008 deadline, the DEIR is materially deficient in almost every category.

Therefore, the Secretary of Environmental Affairs should require MassDOT to continue the Environmental Impact analysis in the form of a Final Environmental Impact Report that addresses the many outstanding issues, most importantly the complete analysis of the Mystic Valley Parkway (Route 16) station.

O-019-011 Further, MassDOT should be required to re-evaluate a schedule in which it will construct what the DEIR describes as the Preferred, Full-Build Alternative -- that is, a terminus station at Route 16 with no parking – in one phase by Dec. 31, 2014, in order to achieve the maximum environmental benefits of the project without delay and within the commonwealth's legal deadline.

MGNA DEIR Analysis – December 30, 2009

O-019-007

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-019-008

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-019-009

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

SPECIFIC POINTS

SUPPORT FOR MYSTIC VALLEY PARKWAY TERMINUS AND ONE-PHASE CONSTRUCTION BY DEC. 31, 2014

We support the Mystic Valley Parkway (Route 16) terminus station, with no parking, as the Preferred Alternative. The DEIR clearly demonstrates that this alternative provides the maximum benefits from the project in regard to:

- Ridership (70% switching from auto travel)
- Reduction of vehicle miles traveled in the service region
- Air quality improvements
- Service to environmental justice communities.

It also demonstrates the acute need for better transit service in this neighborhood, as the intersection of Route 16 and Boston Avenue, had the second highest daily traffic volume (29,000 vehicles) in the entire project area.

O-019-012 *HOWEVER*, the station analysis is incomplete and its design is inadequate and inflicts unnecessary environmental impacts. MassDOT officials have publicly acknowledged putting forth the "worst case scenario" for the Route 16 station; this is not acceptable in a document that is required to minimize all negative impacts.

O-019-013 In addition, the Mystic Valley Parkway Station should be built as part of a single phase, otherwise the environmental benefits will be delayed or possibly never realized, as construction of Phase 2 is unlikely, at best.

A one-phase project build to Route 16 also is preferable because:

- By providing the greatest benefits with regard to air quality, mobility, ridership and environmental justice, the Preferred Alternative is the strongest regional project and would be most competitive in vying for federal funding.
- By MassDOT's own estimate, the cost of constructing the final leg of the extension, from College Avenue to Mystic Valley Parkway, would increase by $50 million by undertaking it in a second phase between 2016-2020.
- Delaying the completion of the project into a second phase would push it outside the scope of the current MEPA and NEPA review process, requiring another complete review, additional costs and further delays. These are unlikely to be undertaken for the benefit of a single station.

SUPPORT FOR ALTERNATIVE DESIGN FOR MYSTIC VALLEY PARKWAY TERMINUS STATION

We applaud MassDOT for designing the stations in a manner that minimizes residential property takings and for not displacing any Medford residents. *HOWEVER*, the same effort has not been made for minimizing commercial property takings, particularly at the Mystic Valley Parkway Station.

O-019-014 We strongly advocate analysis of the Medford Green Line Neighborhood Alliance's alternative design for the Route 16 station, which demonstrates that adjusting the track curvature and platform

O-019-010

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

O-019-011

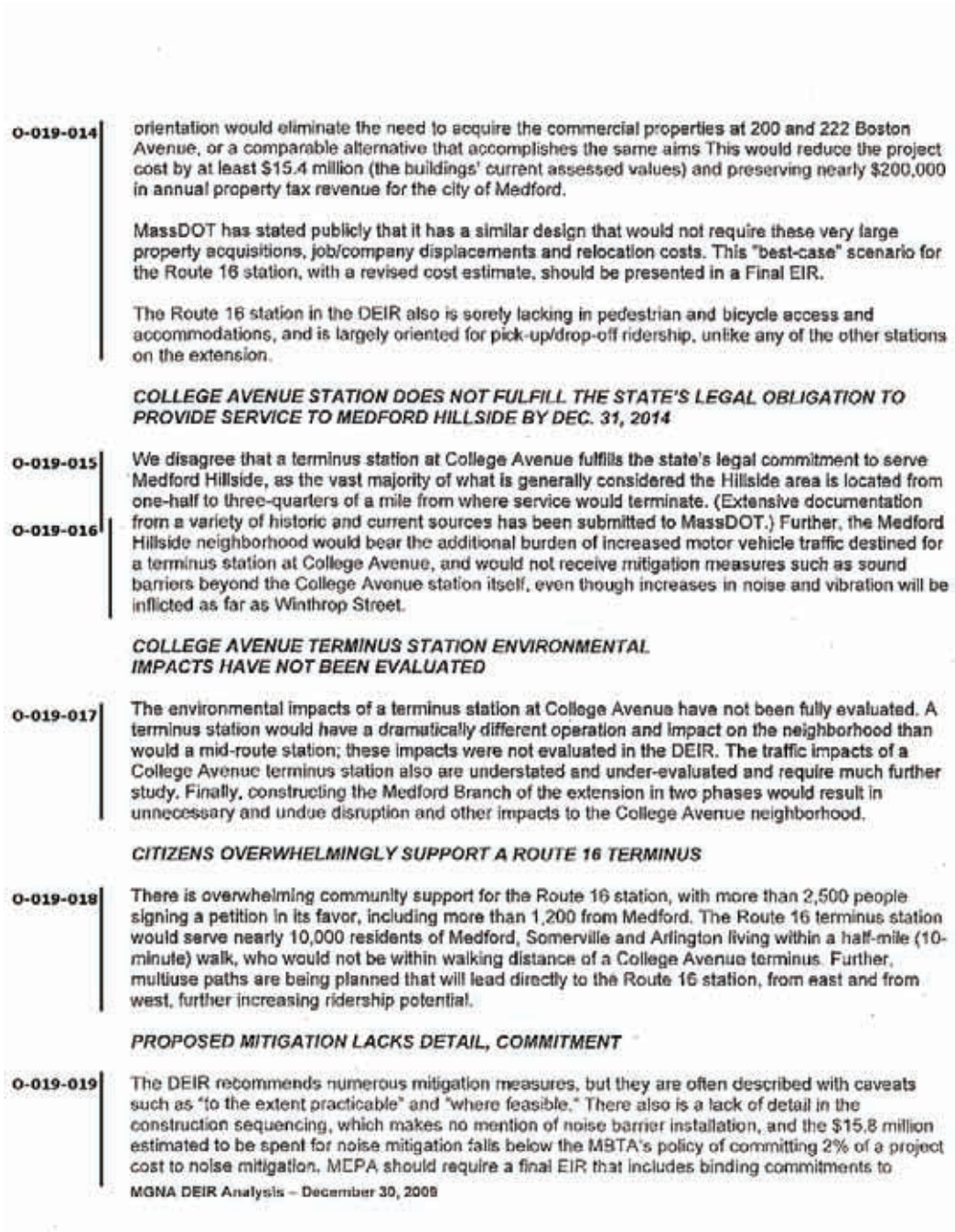
The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), “Determination of Air Quality Emission Reductions.” These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station. MassDOT is anticipating to strive to achieve the goal of 12/31/2014.

O-019-012

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-019-013

All stations for the Green Line Extension project were designed to



O-019-014 orientation would eliminate the need to acquire the commercial properties at 200 and 222 Boston Avenue, or a comparable alternative that accomplishes the same aims This would reduce the project cost by at least $15.4 million (the buildings' current assessed values) and preserving nearly $200,000 in annual property tax revenue for the city of Medford.

MassDOT has stated publicly that it has a similar design that would not require these very large property acquisitions, job/company displacements and relocation costs. This "best-case" scenario for the Route 16 station, with a revised cost estimate, should be presented in a Final EIR.

The Route 16 station in the DEIR also is sorely lacking in pedestrian and bicycle access and accommodations, and is largely oriented for pick-up/drop-off ridership, unlike any of the other stations on the extension.

COLLEGE AVENUE STATION DOES NOT FULFILL THE STATE'S LEGAL OBLIGATION TO PROVIDE SERVICE TO MEDFORD HILLSIDE BY DEC. 31, 2014

O-019-015 We disagree that a terminus station at College Avenue fulfills the state's legal commitment to serve Medford Hillside, as the vast majority of what is generally considered the Hillside area is located from one-half to three-quarters of a mile from where service would terminate. (Extensive documentation

O-019-016 from a variety of historic and current sources has been submitted to MassDOT.) Further, the Medford Hillside neighborhood would bear the additional burden of increased motor vehicle traffic destined for a terminus station at College Avenue, and would not receive mitigation measures such as sound barriers beyond the College Avenue station itself, even though increases in noise and vibration will be inflicted as far as Winthrop Street.

COLLEGE AVENUE TERMINUS STATION ENVIRONMENTAL IMPACTS HAVE NOT BEEN EVALUATED

O-019-017 The environmental impacts of a terminus station at College Avenue have not been fully evaluated. A terminus station would have a dramatically different operation and impact on the neighborhood than would a mid-route station; these impacts were not evaluated in the DEIR. The traffic impacts of a College Avenue terminus station also are understated and under-evaluated and require much further study. Finally, constructing the Medford Branch of the extension in two phases would result in unnecessary and undue disruption and other impacts to the College Avenue neighborhood.

CITIZENS OVERWHELMINGLY SUPPORT A ROUTE 16 TERMINUS

O-019-018 There is overwhelming community support for the Route 16 station, with more than 2,500 people signing a petition in its favor, including more than 1,200 from Medford. The Route 16 terminus station would serve nearly 10,000 residents of Medford, Somerville and Arlington living within a half-mile (10-minute) walk, who would not be within walking distance of a College Avenue terminus. Further, multiuse paths are being planned that will lead directly to the Route 16 station, from east and from west, further increasing ridership potential.

PROPOSED MITIGATION LACKS DETAIL, COMMITMENT

O-019-019 The DEIR recommends numerous mitigation measures, but they are often described with caveats such as "to the extent practicable" and "where feasible." There also is a lack of detail in the construction sequencing, which makes no mention of noise barrier installation, and the $15.8 million estimated to be spent for noise mitigation falls below the MBTA's policy of committing 2% of a project cost to noise mitigation. MEPA should require a final EIR that includes binding commitments to

MGNA DEIR Analysis – December 30, 2009

comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16.

O-019-014

The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP, MassDEP DEIR/EA comment letter, January 8, 2010).

Various community groups have suggested modified concepts for the Mystic Valley Parkway/Route 16 Station. Preliminary evaluation of these concepts showed that the cost of constructing the Green Line Extension to Mystic Valley Parkway/Route 16 would not be reduced sufficiently to be able to be funded at this time. Additional evaluation of the concept as

O-019-019 mitigation as well as additional mitigation measures such as cash payments to affected abutters, and retrofitting the existing commuter rail diesel locomotives with emission-reduction devices. It should commit to providing mitigation such as noise barriers *prior to* construction wherever possible.

MASSDOT HAS FAILED TO TAKE PUBLIC COMMENT AND OPINION INTO ACCOUNT

While MassDOT went through the motions of conducting public outreach and graciously honored meeting requests from citizen interest groups, there is precious little evidence that input from the public was taken to heart, except to support conclusions that they had already reached. In particular,

1) Comprehensive research to establish the extent of the area called "Medford Hillside" was neither accepted or rebutted.
2) Repeated questions about how the Winthrop Street station stop was dropped from consideration have been met with repeated unsubstantiated claims that community opposition prevented it from being seriously considered. MassDOT needs to document the objections that it considered when making this decision.
3) A June 11, 2008 letter to EOT from the State Legislative Delegation (Jehlen, Sciortino, Garballey, Donato) representing Medford and areas adjacent to the Route 16 station seeking analysis of alternative track configurations in the area of a Route 16 terminus went unanswered.
4) In May 2009, requests of EOT to participate in an attempt to redesign the trackwork around a Route 16 terminus in a way that reduced land takings were declined by EOT, in particular citing "limited staff availability."

O-019-020 MassDOT needs an opportunity to complete an FEIR in order to incorporate these public concerns into its plans.

LECHMERE STATION RELOCATION IMPACTS

Midway through the DEIR process, MassDOT was forced to assume the redesign and cost of the relocation of Lechmere Station as part of the Green Line extension project, because a developer was unable to fulfill its commitment to pay for the station relocation into the failed North Point project.

This has added approximately $111 million to the cost of the project, or roughly the estimated cost of the College Avenue to Route 16 section of the extension. More than anything, this circumstance has forced MassDOT to relegate this final portion of the Green Line extension to Medford into a second phase, to be built sometime between 2016 and 2020, even though the DEIR demonstrates that the Full Build Alternative to Route 16 provides the greatest air quality benefits.

O-019-021 MEPA should require MassDOT to seek alternative funding the for Lechmere Station relocation, as well as redesigning major project elements such as the Route 16 station, to reduce costs in order for the entire project to be built in one phase by Dec. 31, 2014.

CONCLUSION

The new Massachusetts Department of Transportation is committed to make "investments and decisions that strengthen communities, support economic growth and improve public health." The Green Line extension is the perfect example of a project that will fulfill that mission, but only if it is built in the most environmentally beneficial and cost-effective manner, which is to continue the Environmental Impact Report in a manner that will enable the Commonwealth to construct the main branch to Route 16 in Medford in one phase by Dec. 31, 2014.

MGNA DEIR Analysis – December 30, 2009

it relates to the MBTA's design standards, operations and other requirements would be necessary in order to determine the full cost savings of a redesigned station. While MassDOT has not been required to revisit the design of this station as part of the FEIR document, further evaluations may consider the redesign options presented by the MGNA in future analyses.

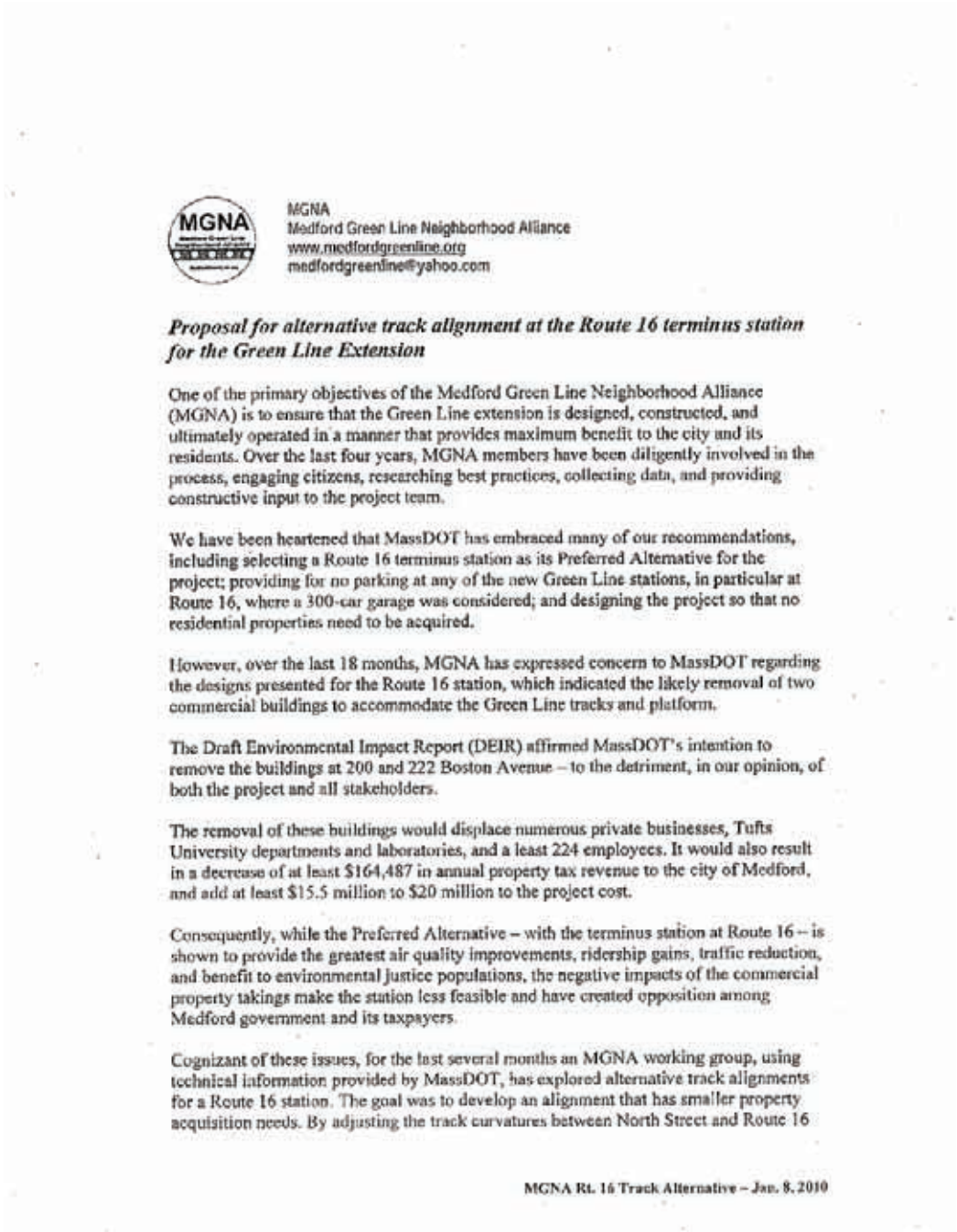
O-019-015

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

O-019-016

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has



MGNA
Medford Green Line Neighborhood Alliance
www.medfordgreenline.org
medfordgreenline@yahoo.com

Proposal for alternative track alignment at the Route 16 terminus station for the Green Line Extension

One of the primary objectives of the Medford Green Line Neighborhood Alliance (MGNA) is to ensure that the Green Line extension is designed, constructed, and ultimately operated in a manner that provides maximum benefit to the city and its residents. Over the last four years, MGNA members have been diligently involved in the process, engaging citizens, researching best practices, collecting data, and providing constructive input to the project team.

We have been heartened that MassDOT has embraced many of our recommendations, including selecting a Route 16 terminus station as its Preferred Alternative for the project; providing for no parking at any of the new Green Line stations, in particular at Route 16, where a 300-car garage was considered; and designing the project so that no residential properties need to be acquired.

However, over the last 18 months, MGNA has expressed concern to MassDOT regarding the designs presented for the Route 16 station, which indicated the likely removal of two commercial buildings to accommodate the Green Line tracks and platform.

The Draft Environmental Impact Report (DEIR) affirmed MassDOT's intention to remove the buildings at 200 and 222 Boston Avenue – to the detriment, in our opinion, of both the project and all stakeholders.

The removal of these buildings would displace numerous private businesses, Tufts University departments and laboratories, and a least 224 employees. It would also result in a decrease of at least $164,487 in annual property tax revenue to the city of Medford, and add at least $15.5 million to $20 million to the project cost.

Consequently, while the Preferred Alternative – with the terminus station at Route 16 – is shown to provide the greatest air quality improvements, ridership gains, traffic reduction, and benefit to environmental justice populations, the negative impacts of the commercial property takings make the station less feasible and have created opposition among Medford government and its taxpayers.

Cognizant of these issues, for the last several months an MGNA working group, using technical information provided by MassDOT, has explored alternative track alignments for a Route 16 station. The goal was to develop an alignment that has smaller property acquisition needs. By adjusting the track curvatures between North Street and Route 16

MGNA Rt. 16 Track Alternative – Jan. 8, 2010

complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Chapter 4 of the FEIR describes the noise impacts and mitigation measures for the College Avenue Station. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-019-017

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

O-019-018

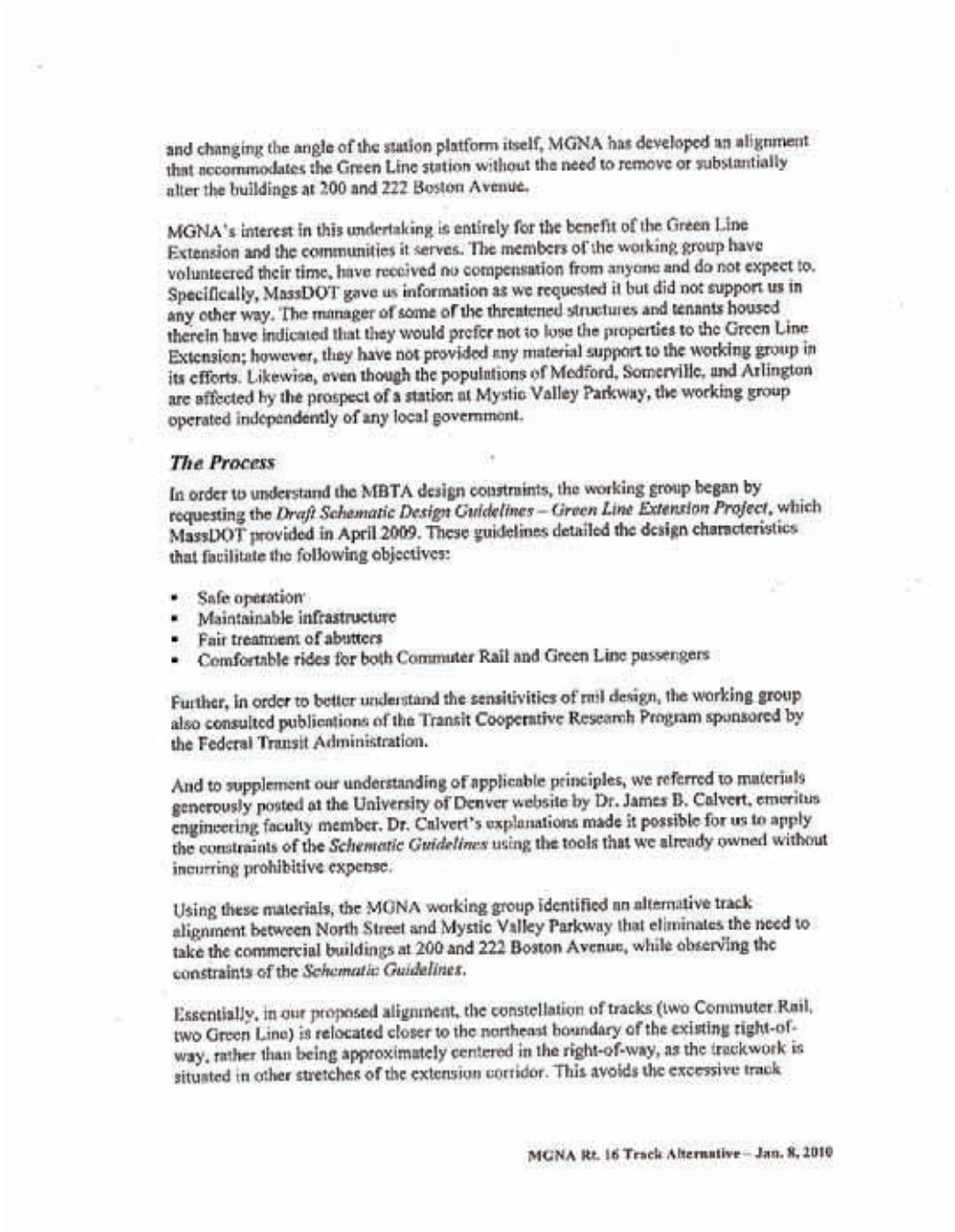
Limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

O-019-019

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8. During preliminary engineering, detailed designs related to mitigation will be developed.

O-019-020

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project.



and changing the angle of the station platform itself, MGNA has developed an alignment that accommodates the Green Line station without the need to remove or substantially alter the buildings at 200 and 222 Boston Avenue.

MGNA's interest in this undertaking is entirely for the benefit of the Green Line Extension and the communities it serves. The members of the working group have volunteered their time, have received no compensation from anyone and do not expect to. Specifically, MassDOT gave us information as we requested it but did not support us in any other way. The manager of some of the threatened structures and tenants housed therein have indicated that they would prefer not to lose the properties to the Green Line Extension; however, they have not provided any material support to the working group in its efforts. Likewise, even though the populations of Medford, Somerville, and Arlington are affected by the prospect of a station at Mystic Valley Parkway, the working group operated independently of any local government.

The Process

In order to understand the MBTA design constraints, the working group began by requesting the *Draft Schematic Design Guidelines – Green Line Extension Project*, which MassDOT provided in April 2009. These guidelines detailed the design characteristics that facilitate the following objectives:

- Safe operation
- Maintainable infrastructure
- Fair treatment of abutters
- Comfortable rides for both Commuter Rail and Green Line passengers

Further, in order to better understand the sensitivities of rail design, the working group also consulted publications of the Transit Cooperative Research Program sponsored by the Federal Transit Administration.

And to supplement our understanding of applicable principles, we referred to materials generously posted at the University of Denver website by Dr. James B. Calvert, emeritus engineering faculty member. Dr. Calvert's explanations made it possible for us to apply the constraints of the *Schematic Guidelines* using the tools that we already owned without incurring prohibitive expense.

Using these materials, the MGNA working group identified an alternative track alignment between North Street and Mystic Valley Parkway that eliminates the need to take the commercial buildings at 200 and 222 Boston Avenue, while observing the constraints of the *Schematic Guidelines*.

Essentially, in our proposed alignment, the constellation of tracks (two Commuter Rail, two Green Line) is relocated closer to the northeast boundary of the existing right-of-way, rather than being approximately centered in the right-of-way, as the trackwork is situated in other stretches of the extension corridor. This avoids the excessive track

MGNA Rt. 16 Track Alternative – Jan. 8, 2010

This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA, and provides responses to all comments on the DEIR.

O-019-021

MassDOT will continue to work with MAPC and the Legislature to identify funding opportunities for the extension to Mystic Valley Parkway/Route 16.

proximity to the east corner of 200 Boston Avenue and to the northeast walls of 200 Boston Avenue and 222 Boston Avenue.

More specifically, our alternative has these characteristics:

1. It is wholly confined within the existing railroad right-of-way except for a sliver taking from a commercial parking lot (Medford), one vacant commercial lot (Somerville) and one commercial building and lot (Somerville).
2. It uses curve radii well within the *Schematic Guidelines'* specifications, typically double the minimum and sometimes triple the minimum, thereby improving passenger comfort, reducing risk of excessive noise and decreasing the torque on rolling stock that arises in approaches to banked trackwork.
3. Where conflicting constraints appear, it uses the more stringent specification, taking a conservative approach.
4. It achieves all spiral and tangent track goals including a tangent 450-foot platform and tangent platform approach, in order to avoid wheel squeal.
5. It eliminates the need to place trackwork on the very locations where the northeast walls of 200 and 222 Boston Avenue stand today.

A fully detailed description of the alignment is provided below, and conceptual drawings are attached.

Conclusion

O-019-022

MGNA put forward our alternative alignment for the tracks between North Street and Mystic Valley Parkway, and the reorientation of the station platform, in hopes that it can contribute to a design for the Route 16 terminus that does not necessitate taking the commercial properties at 200 and 222 Boston Avenue in Medford. There are doubtless other solutions that qualified engineering personnel could discover to achieve the same objectives, and we ask that one of these be included in the Final EIR/EA for the Green Line extension project, rather than the worst-case scenario that is presented in the DEIR/EA.

References

[1] *Draft Schematic Design Guidelines – Green Line Extension Project* – April 2009 – VHB/Vanasse Hangen Brustlin, Inc., *et al.*
[2] *Track Design Handbook for Light Rail Transit* – 1999 – Transit Cooperative Research Program Report 57 – sponsored by the Federal Transit Administration
[3] *Beyond Lechmere Northwest Corridor Study* – August 2005 – VHB/Vanasse Hangen Brustlin, Inc., *et al.*
[4] *Degree of Curvature* – James B. Calvert, University of Denver – last revised 20-Jun-2004

O-019-022

Various community groups have suggested modified concepts for the Mystic Valley Parkway/Route 16 Station. Preliminary evaluation of these concepts showed that the cost of constructing the Green Line Extension to Mystic Valley Parkway/Route 16 would not be reduced sufficiently to be able to be funded at this time. Additional evaluation of the concept as it relates to the MBTA's design standards, operations and other requirements would be necessary in order to determine the full cost savings of a redesigned station. While MassDOT has not been required to revisit the design of this station as part of the FEIR document, further evaluations may consider the redesign options presented by the MGNA in future analyses.

Details

Relocation of Commuter Rail tracks to shift them away from the threatened properties:

- 900-foot compound curve ("S" curve) comprising two 200-foot circular curves with spiral transitions separated in the center with a 100-foot tangent.
- Heading south, the compound curve begins at the south bridgehead of the Mystic Valley Parkway Bridge and completes approximately even with the east corner of 200 Boston Avenue.
- Shifts tracks 22 feet to the north-east (away from 200 Boston Avenue and 222 Boston Avenue) instead 13 feet, which the DEIR alignment achieves.
- Conforms to design standards as follows:
  - Limits circular radius to 7640 feet (corresponding to 0°45'00" degree of curvature) compared to a preferred minimum of 4297 feet (corresponding to 1°20'00" degree of curvature) – [1] § *1.2.9.1 Commuter Rail Geometric Design*
  - With 0°45'00" curves, meets 60 miles per hour design speed with <½ inch superelevation – [2] extrapolation from *Table 3.2.2b Desired Superelevation and Minimum Spiral Curve Length (English Units)*
  - Includes four 100-foot spiral transitions (into and out of each of the two opposed circular curves) – [1] § *1.2.9.1 Commuter Rail Geometric Design*
  - Includes 100 foot tangent track at spiral reversal – [1] § *1.2.9.1 Commuter Rail Geometric Design*
  - Minimum clearance from right-of-way property line to centerline of closest track is 12½ feet *vs. Guidelines'* 8½ feet minimum and 10 feet preferred clearance to retaining wall – [1] *Figure 1-8 Typical Section*
  - Centerline clearances between adjacent tracks on tangents is 13 feet (greater on curves) as per *Guidelines* – [1] *Figure 1-8 Typical Section*
- Not shown in this drawing, between North Street and Winthrop Street, additional curved trackwork returns the track constellation to an alignment roughly centered in the railroad right-of-way, the position it occupies for most of the extension corridor.

Placement of Green Line tracks to clear the affected preexisting structures:

- 400-foot simple curve comprising one circular curve with spiral transitions
- Heading north, the outbound track curve begins 125 feet north of North Street bridge; inbound track curve begins just south of North Street bridge
- Adheres to design standards as follows:
  - Minimum clearance from adjacent pre-existing structures at 200 Boston Avenue and 222 Boston Avenue to centerline of closest track is 13½ feet vs. *Guidelines'* 8 feet preferred and 6½ feet allowed with niches – [1] § *1.2.9.2 Light Rail Geometric Design*, [1] *Figure 1-8 Typical Section*
  - Includes a single 200-foot circular curve with minimum radius of 3274.3 feet (corresponding to 1°45'00" degree of curvature) compared to minimum preferred 1000 feet (corresponding to 5°43'00" degree of curvature) – [1] § *1.2.9.2 Light Rail Geometric Design*

- Includes two 100-foot spiral transitions (into and out of circular curve) – [1] § *1.2.9.2 Light Rail Geometric Design*
- Includes the 450-foot platform required for terminal stations – [1] § *1.2.11 Table 1-5 Station Requirements*
- Provides a 20 foot wide platform, consistent with the DEIR (this dimension is unspecified in [1] without ridership forecasts – see [1] § *1.2.11.3 Access*)
- An Area of Refuge (point of safety) is located at the south end of the platform – [1] § *1.2.11.3 Access*
- Provides a tangent-track (0°00'00") platform even though curves as tight as 2°00'00" are allowed – [1] § *1.2.9.2 Light Rail Stations*
- Includes 100-foot tangent track approaching platform – [1] § *1.2.9.2 Light Rail Stations*
- Centerline clearances between adjacent Green Line tracks on tangents is 13 feet, consistent with preferred spacing (although 12-foot spacing is allowed) – [1] § *1.2.9.2 Light Rail Geometric Design Minimum distance between centerline of tracks*

- Not shown in this drawing, between North Street and Winthrop Street, additional curved trackwork returns the track constellation to an alignment roughly centered in the railroad right-of-way, the position it occupies for most of the extension corridor.

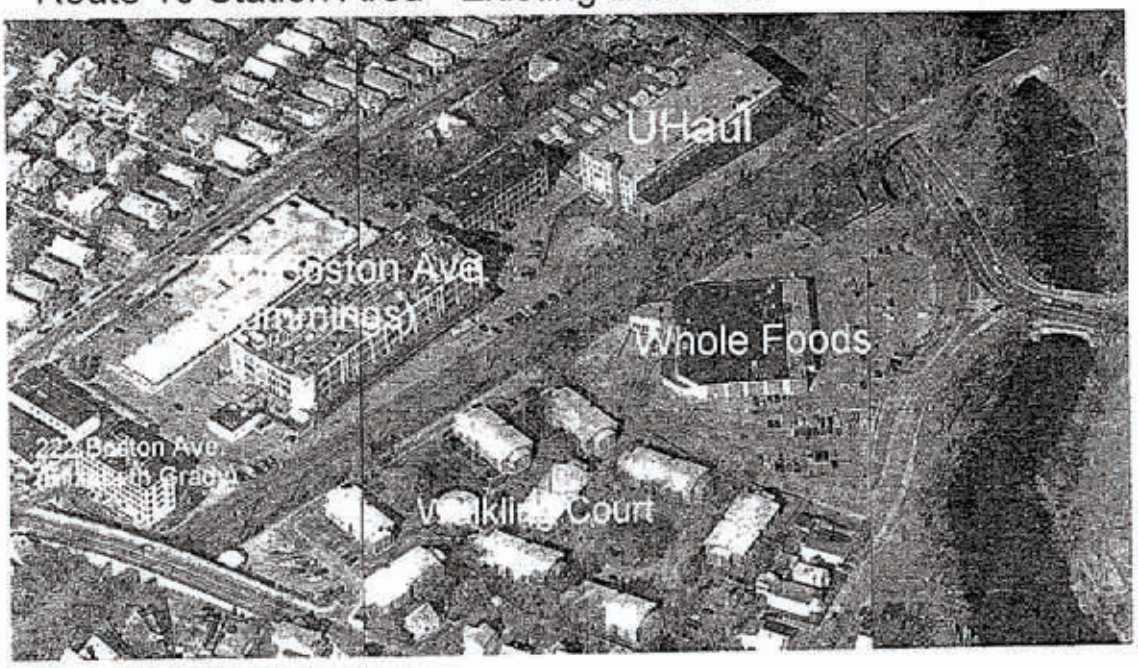
Contact Information

For more information, please contact
John Roland Elliott, MGNA Working Group Principal
johnrolandelliott@comcast.net
617-905-8675 (m)

Ken Krause, MGNA Working Group Participant
kenneth.krause@comcast.net
781-874-0920 (w)

DEIR: Analysis and Response

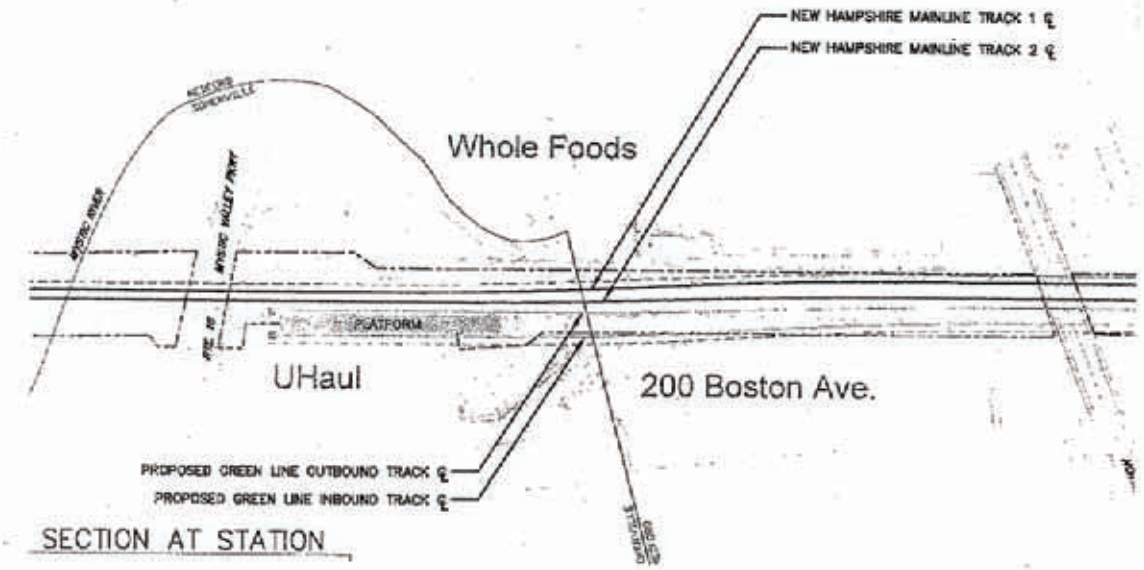
Route 16 Station Area - Existing Land Use



DEIR: Analysis and Response

EOT Design 1, Feb. 2008

- No conflict with office buildings or North Street bridge
- Commuter rail tracks shown shifted east; 225-foot platform



DEIR: Environmental Impact

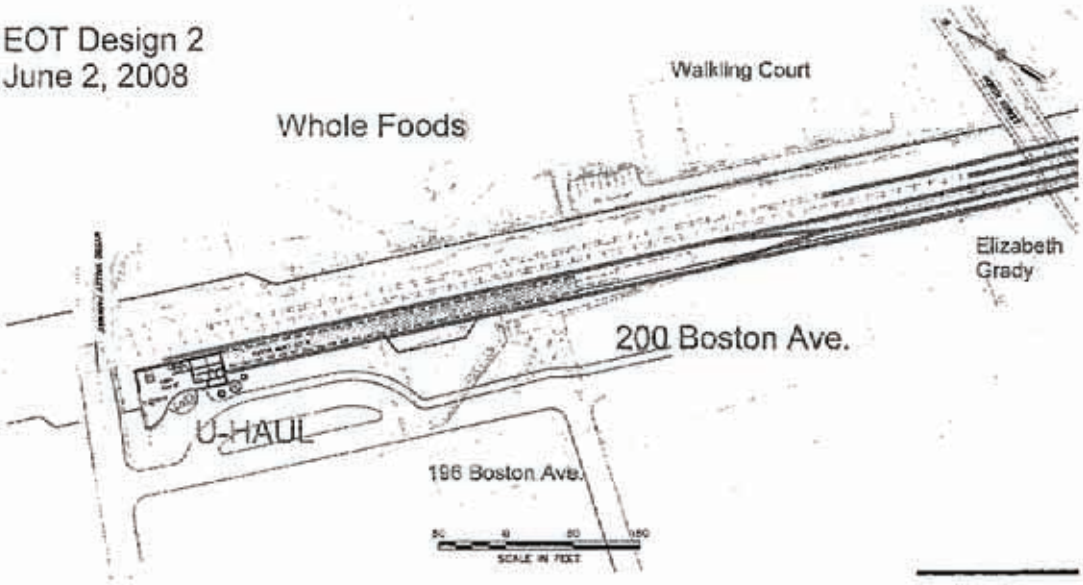
In Appendix B of the DEIR, the EOT states:

"In February of 2008, a series of public workshops were conducted in the neighborhoods to discuss the proposed station areas and to obtain feedback from stakeholders on the various concepts developed.

"Based on previous work and the feedback obtained at these workshops, the **station concepts for** Gilman Square and **Mystic Valley Parkway / Route 16 were generally accepted by the public and local officials and did not require additional evaluation."**

DEIR: Analysis and Response

EOT Design 2
June 2, 2008

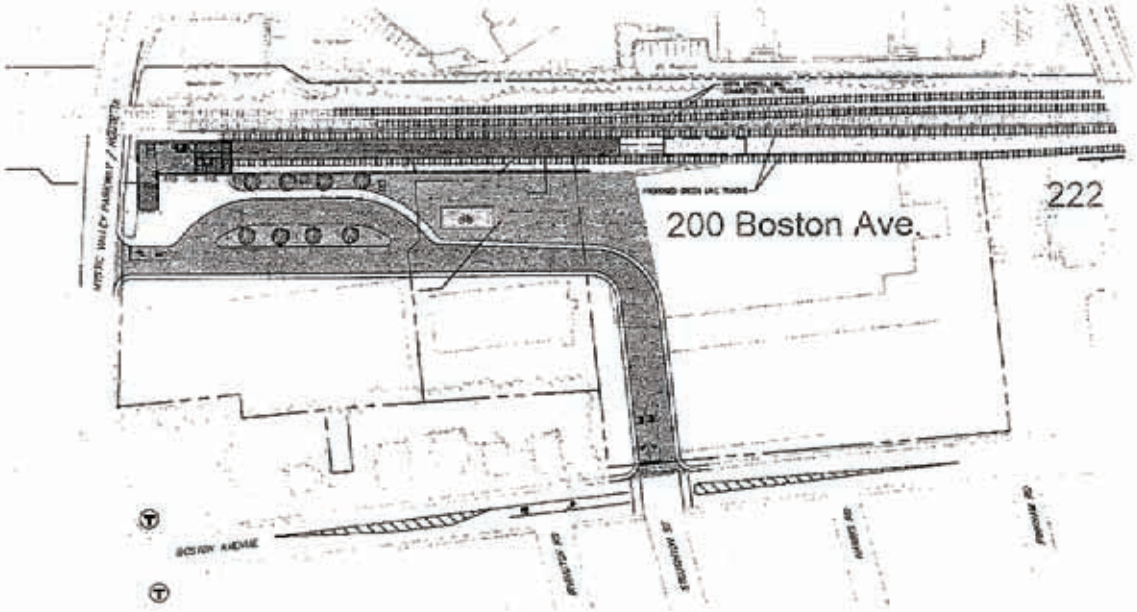


- Third Green Line track added; conflicts shown with office buildings and bridge
- Commuter rail tracks returned to existing position, platform lengthened to 450 ft.

DEIR: Analysis and Response

EOT Design 3
March/Oct. 2009

- Third Green Line track removed
- Commuter rail tracks again shifted east, but not Green Line tracks, which also have excessive spacing in between them



DEIR: Analysis and Response

MGNA Design Alternative November 2009

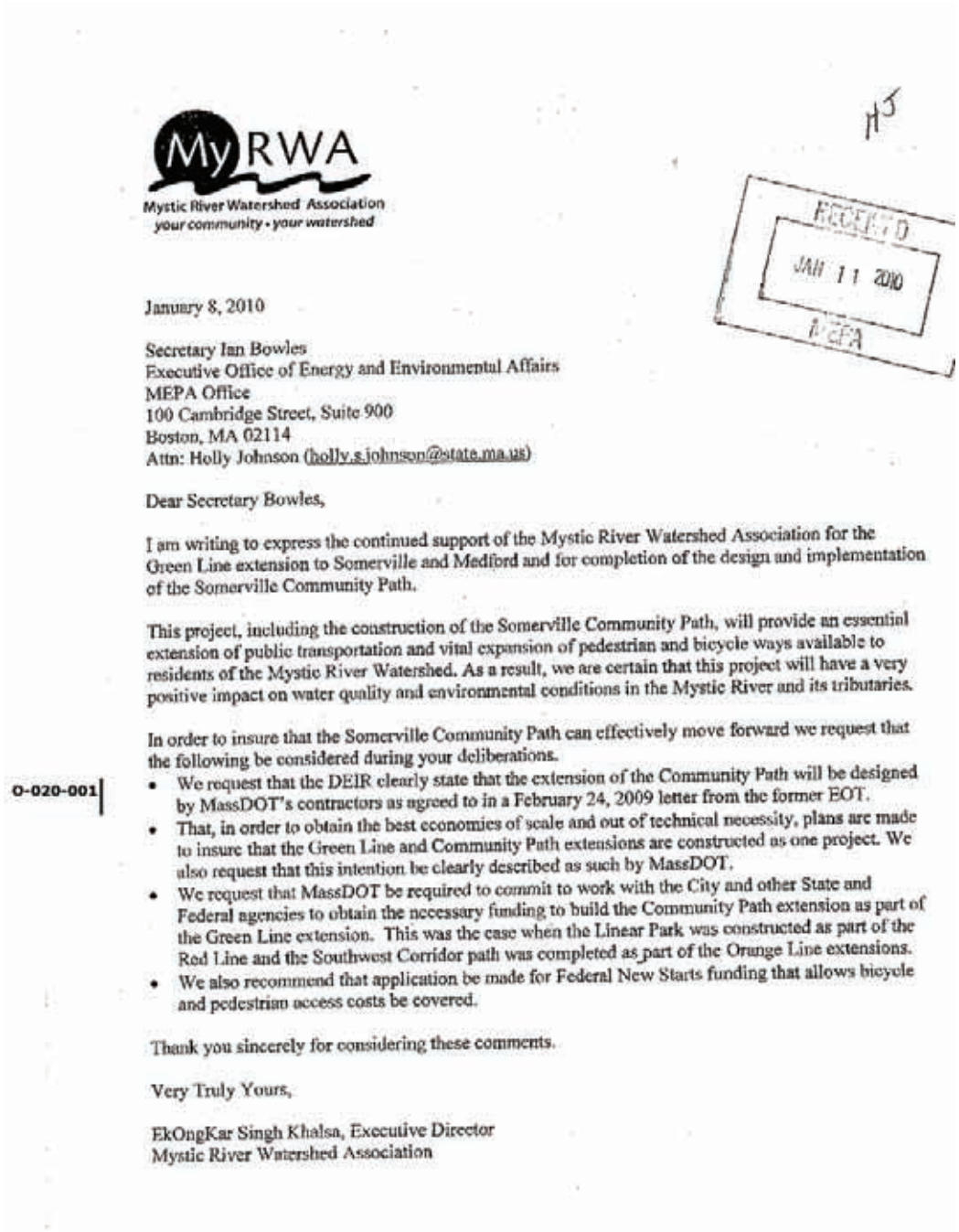
- Commuter rail tracks shifted east, within right-of-way
- Green Line tracks gently curved, within EOT/FTA guidelines
- Platform orientation changed; no conflicts with office buildings or need to acquire them to accommodate station



DEIR: Analysis and Response

MGNA Route 16 Alternative Station Design Advantages

- Eliminates need to acquire 200 and 222 Boston Avenue properties, preserving businesses
- Preserves $182,000 in annual property tax revenue to Medford, which is likely to greatly increase with the advent of Green Line service, which will raise the buildings' asessed values
- Reduces project cost by at least $15.4 million (buildings' current assessed values)
- Saves cost of relocating displaced companies and employees



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Mystic River Watershed Association
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H5

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MEPA

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114
Attn: Holly Johnson (holly.s.johnson@state.ma.us)

Dear Secretary Bowles,

I am writing to express the continued support of the Mystic River Watershed Association for the Green Line extension to Somerville and Medford and for completion of the design and implementation of the Somerville Community Path.

This project, including the construction of the Somerville Community Path, will provide an essential extension of public transportation and vital expansion of pedestrian and bicycle ways available to residents of the Mystic River Watershed. As a result, we are certain that this project will have a very positive impact on water quality and environmental conditions in the Mystic River and its tributaries.

In order to insure that the Somerville Community Path can effectively move forward we request that the following be considered during your deliberations.

O-020-001

- We request that the DEIR clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the former EOT.
- That, in order to obtain the best economies of scale and out of technical necessity, plans are made to insure that the Green Line and Community Path extensions are constructed as one project. We also request that this intention be clearly described as such by MassDOT.
- We request that MassDOT be required to commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extension. This was the case when the Linear Park was constructed as part of the Red Line and the Southwest Corridor path was completed as part of the Orange Line extensions.
- We also recommend that application be made for Federal New Starts funding that allows bicycle and pedestrian access costs be covered.

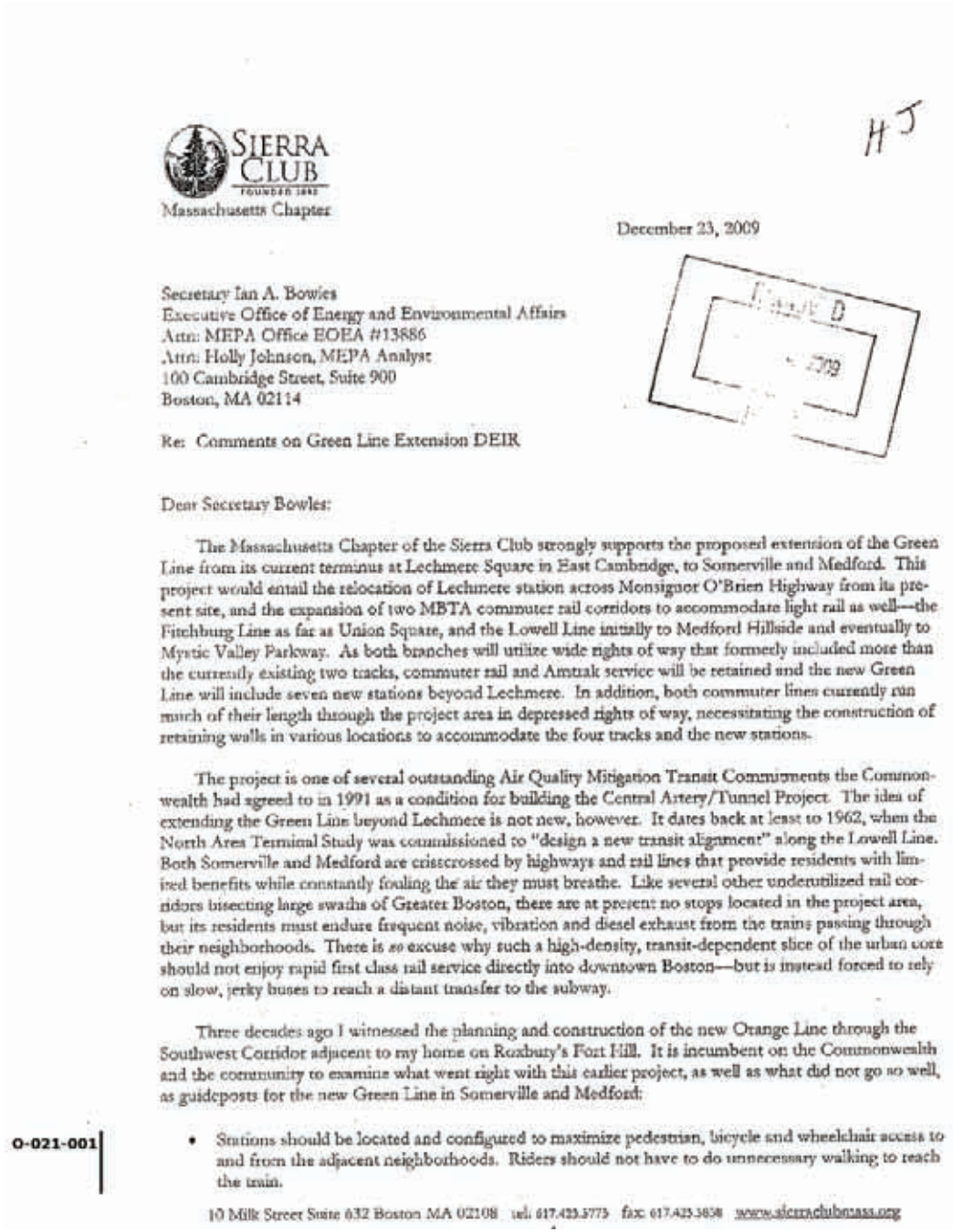
Thank you sincerely for considering these comments.

Very Truly Yours,

EkOngKar Singh Khalsa, Executive Director
Mystic River Watershed Association

O-020-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.



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Massachusetts Chapter

H 5

December 23, 2009

Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office EOEA #13686
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Comments on Green Line Extension DEIR

Dear Secretary Bowles:

The Massachusetts Chapter of the Sierra Club strongly supports the proposed extension of the Green Line from its current terminus at Lechmere Square in East Cambridge, to Somerville and Medford. This project would entail the relocation of Lechmere station across Monsignor O'Brien Highway from its present site, and the expansion of two MBTA commuter rail corridors to accommodate light rail as well—the Fitchburg Line as far as Union Square, and the Lowell Line initially to Medford Hillside and eventually to Mystic Valley Parkway. As both branches will utilize wide rights of way that formerly included more than the currently existing two tracks, commuter rail and Amtrak service will be retained and the new Green Line will include seven new stations beyond Lechmere. In addition, both commuter lines currently run much of their length through the project area in depressed rights of way, necessitating the construction of retaining walls in various locations to accommodate the four tracks and the new stations.

The project is one of several outstanding Air Quality Mitigation Transit Commitments the Commonwealth had agreed to in 1991 as a condition for building the Central Artery/Tunnel Project. The idea of extending the Green Line beyond Lechmere is not new, however. It dates back at least to 1962, when the North Area Terminal Study was commissioned to "design a new transit alignment" along the Lowell Line. Both Somerville and Medford are crisscrossed by highways and rail lines that provide residents with limited benefits while constantly fouling the air they must breathe. Like several other underutilized rail corridors bisecting large swaths of Greater Boston, there are at present no stops located in the project area, but its residents must endure frequent noise, vibration and diesel exhaust from the trains passing through their neighborhoods. There is *no* excuse why such a high-density, transit-dependent slice of the urban core should not enjoy rapid first class rail service directly into downtown Boston—but is instead forced to rely on slow, jerky buses to reach a distant transfer to the subway.

Three decades ago I witnessed the planning and construction of the new Orange Line through the Southwest Corridor adjacent to my home on Roxbury's Fort Hill. It is incumbent on the Commonwealth and the community to examine what went right with this earlier project, as well as what did not go so well, as guideposts for the new Green Line in Somerville and Medford:

O-021-001

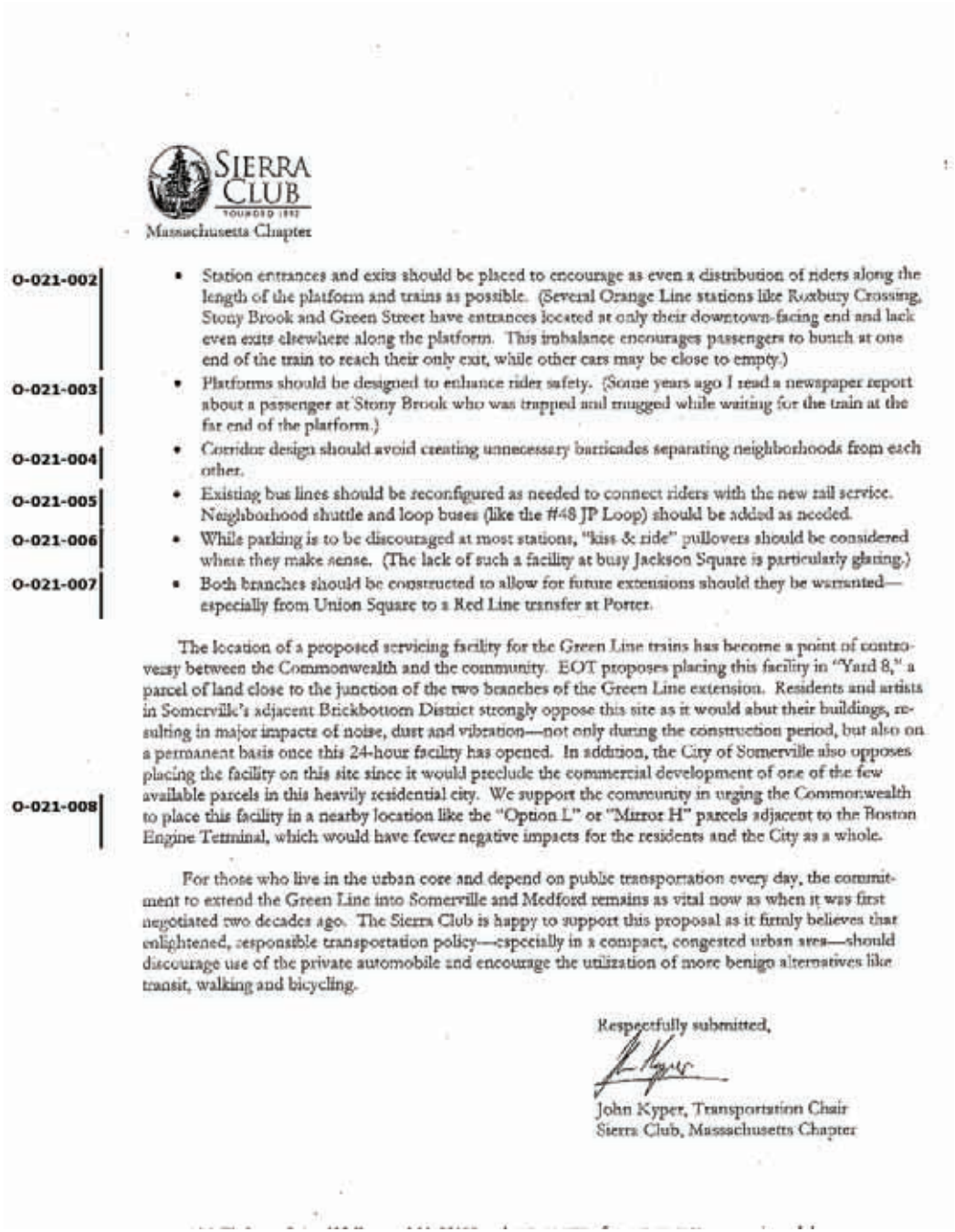
- Stations should be located and configured to maximize pedestrian, bicycle and wheelchair access to and from the adjacent neighborhoods. Riders should not have to do unnecessary walking to reach the train.

10 Milk Street Suite 632 Boston MA 02108 tel: 617.423.5775 fax: 617.423.3658 www.sierraclubmass.org

O-021-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



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Massachusetts Chapter

O-021-002
- Station entrances and exits should be placed to encourage as even a distribution of riders along the length of the platform and trains as possible. (Several Orange Line stations like Roxbury Crossing, Stony Brook and Green Street have entrances located at only their downtown-facing end and lack even exits elsewhere along the platform. This imbalance encourages passengers to bunch at one end of the train to reach their only exit, while other cars may be close to empty.)

O-021-003
- Platforms should be designed to enhance rider safety. (Some years ago I read a newspaper report about a passenger at Stony Brook who was trapped and mugged while waiting for the train at the far end of the platform.)

O-021-004
- Corridor design should avoid creating unnecessary barricades separating neighborhoods from each other.

O-021-005
- Existing bus lines should be reconfigured as needed to connect riders with the new rail service. Neighborhood shuttle and loop buses (like the #48 JP Loop) should be added as needed.

O-021-006
- While parking is to be discouraged at most stations, "kiss & ride" pullovers should be considered where they make sense. (The lack of such a facility at busy Jackson Square is particularly glaring.)

O-021-007
- Both branches should be constructed to allow for future extensions should they be warranted—especially from Union Square to a Red Line transfer at Porter.

The location of a proposed servicing facility for the Green Line trains has become a point of controversy between the Commonwealth and the community. EOT proposes placing this facility in "Yard 8," a parcel of land close to the junction of the two branches of the Green Line extension. Residents and artists in Somerville's adjacent Brickbottom District strongly oppose this site as it would abut their buildings, resulting in major impacts of noise, dust and vibration—not only during the construction period, but also on a permanent basis once this 24-hour facility has opened. In addition, the City of Somerville also opposes placing the facility on this site since it would preclude the commercial development of one of the few available parcels in this heavily residential city. We support the community in urging the Commonwealth

O-021-008

to place this facility in a nearby location like the "Option L" or "Mirror H" parcels adjacent to the Boston Engine Terminal, which would have fewer negative impacts for the residents and the City as a whole.

For those who live in the urban core and depend on public transportation every day, the commitment to extend the Green Line into Somerville and Medford remains as vital now as when it was first negotiated two decades ago. The Sierra Club is happy to support this proposal as it firmly believes that enlightened, responsible transportation policy—especially in a compact, congested urban area—should discourage use of the private automobile and encourage the utilization of more benign alternatives like transit, walking and bicycling.

Respectfully submitted,

John Kyper, Transportation Chair
Sierra Club, Massachusetts Chapter

O-021-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-021-003

The DEIR/EA and FEIR are based on conceptual station designs. Designs for each station, including safety features, will be refined during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan, Chapter 6 of the FEIR.

O-021-004

MassDOT seeks to maximize community connectivity with the Green Line Extension Project. The DEIR/EA and FEIR include conceptual Project designs. Designs for each station, the storage and maintenance facility, and the entire project alignment will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-021-005

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the

FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-021-006

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

The only Green Line Extension station that will provide parking is Lechmere Station. Drop-off and pick-up areas will be provided at at several stations. These will accommodate expected kiss-and-ride activity.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-021-007

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and

infrastructure design with conceptual future Green Line additions and extensions.

O-021-008

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Somerville Chamber of Commerce
2 Alpine Street, Post Office Box 440343
Somerville, Massachusetts 02144

January 7, 2010

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JAN 8 2010
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Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

On behalf of the Somerville Chamber of Commerce, thank you for the opportunity to submit comments on this project which is so vital to Somerville and the Commonwealth. We very much appreciate MassDOT's effort to move the project forward with the release of the Draft EIR. However, there are a number of key issues that should be addressed.

General Support & Overarching Issue

O-022-001

Generally, the Chamber supports the first phase integration of the Community Path and the Mystic Valley Parkway / Route 16 terminus as well as coordinated planning with the McGrath/O'Brien Highway project. From the business community's perspective the overarching economic issue is the location of the Green Line support facility and the fact that this is a $1B project without an economic development plan.

Brief Background of Federal, State, Local Relevance

As the most densely populated city in New England with the least urban commercial tax base in Boston's urban core, Somerville is inordinately dependent on state aid and structurally challenged to deliver public works, public safety, and public education – cornerstones of the urban quality of life. U.S. Secretary of Transportation Ray LaHood recently framed a strategy for this challenge.

> We see transportation ...as a gateway to economic development and a better quality of life... To put that into action, DOT will listen more carefully to state, regional, and community priorities, the kinds of priorities that small businesses help shape.

With Somerville's Innerbelt Brickbottom area as close to Boston's City Hall as the Prudential Center is, the Metropolitan Planning Organization has articulated the area's importance to the development of the Boston metropolitan region.

> The corridor is very attractive for economic development and presents a unique opportunity to transform the existing postindustrial landscape into a visual and functional continuum of urban space with human scale.

Telephone 617-776-4100 • Fax 617-776-1157 • Email: info@somervillechamber.org • Web: www.somervillechamber.org

O-022-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

In order to fund any state share of the costs of constructing the Green Line Extension project, MassDOT will need to make use of capital funds raised through Commonwealth bonding. Should the existing bond authorization for the State Implementation Plan projects (of which the Green Line Extension project is one) not be sufficient, MassDOT will need to work with the Legislature and the Executive Office of Administration & Finance to provide additional bond authorization to cover those costs of the Green Line Extension project for which the Commonwealth is responsible.

The EENF further refined the opportunity.

> This project is a hallmark of the Commonwealth's commitment to the principles and practice of smart growth… New public and private investments can revitalize the social and environmental fabric of the corridor.

In November 2009, under the new aegis of the Massachusetts Department of Transportation, MassDOT's opening presentation on the project said "we view this as an economic development project."

Request for Detailed Analysis of Three Options

O-022-002

The one characteristic that all maintenance and storage options (Yard 8, Mirror H, Option L, and Option L-BET) have in common is that they are in Somerville – with Mirror H encroaching slightly on Cambridge. In light of the fact that Somerville already suffers "a disproportionate burden" as the sole host of the 43 acre, non-taxable, Commuter Rail Maintenance Facility complex (a.k.a. BET) and in light of Executive Order 385 Sections 5-7, the Chamber requests the elimination of a Yard 8 from consideration and requests full analysis of Mirror H, Option L, and Mr. Alan Moore's recommended Option L-BET.

Request for Smart Growth Focus by Key Agencies

O-022-003

We believe that a more detailed analysis of Mirror H, Option L, and Option L-BET is completely consistent with U.S.DOT, the MPO, and MassDOT and that such analysis would indicate a sincere government effort to effectively apply "the principles and practices of smart growth" to minimize Somerville's disproportionate burden and maximize its economic potential in the Innerbelt Brickbottom area. As we have through much of this project, we strongly recommend that the Executive Office of Housing and Economic Development participate in such analysis. By developing "a more detailed corridor study to examine zoning, development opportunities," MassDOT's combined 50 acres of maintenance and storage needs may be fully accommodated in Somerville and the Commonwealth may begin to realize the economic fruit of a $1B project.

Sincerely,

Stephen V. Mackey
President / CEO

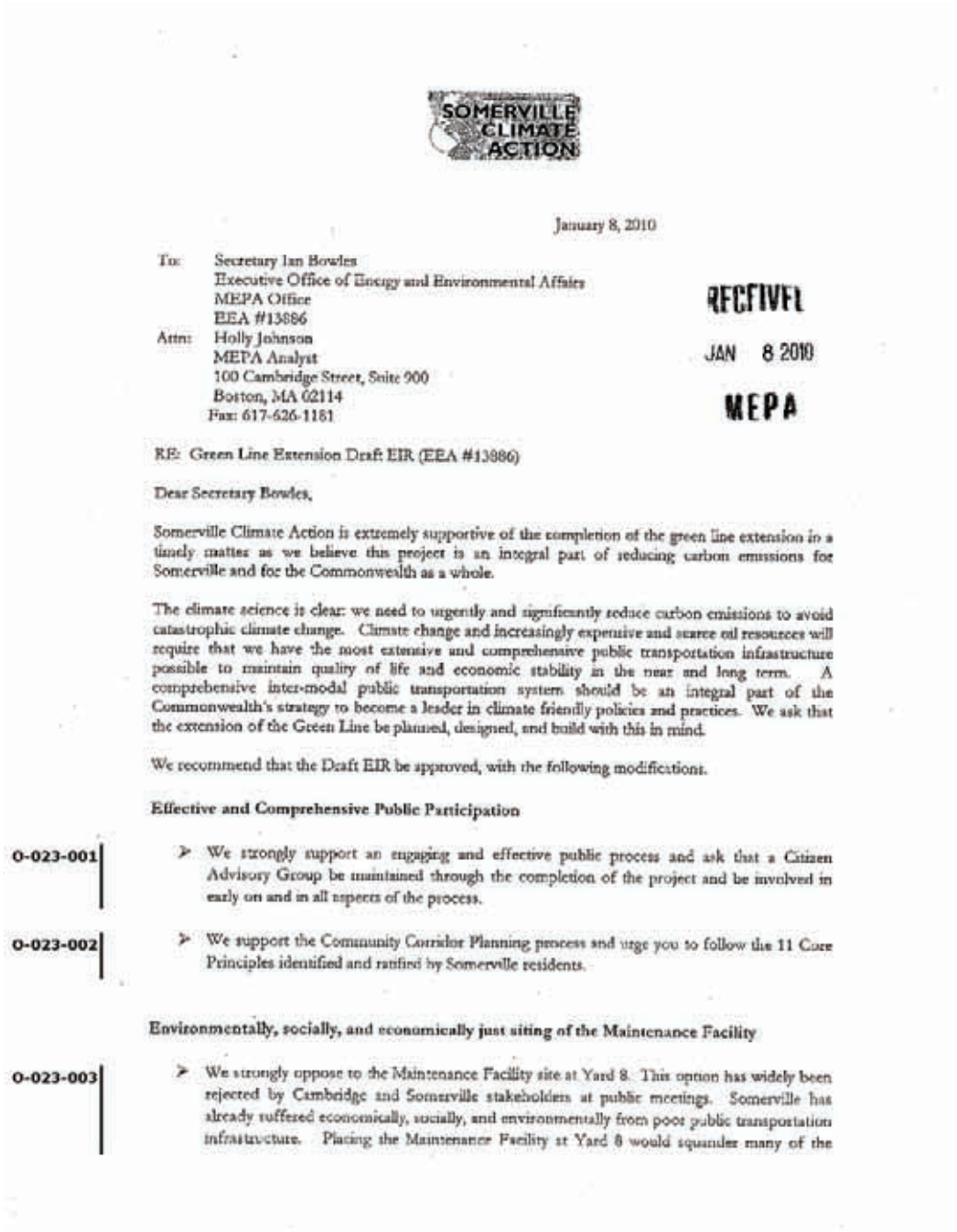
O-022-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-022-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.



SOMERVILLE CLIMATE ACTION

January 8, 2010

To: Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
EEA #13886
Attn: Holly Johnson
MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181

RECEIVED
JAN 8 2010
MEPA

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,

Somerville Climate Action is extremely supportive of the completion of the green line extension in a timely matter as we believe this project is an integral part of reducing carbon emissions for Somerville and for the Commonwealth as a whole.

The climate science is clear: we need to urgently and significantly reduce carbon emissions to avoid catastrophic climate change. Climate change and increasingly expensive and scarce oil resources will require that we have the most extensive and comprehensive public transportation infrastructure possible to maintain quality of life and economic stability in the near and long term. A comprehensive inter-modal public transportation system should be an integral part of the Commonwealth's strategy to become a leader in climate friendly policies and practices. We ask that the extension of the Green Line be planned, designed, and build with this in mind.

We recommend that the Draft EIR be approved, with the following modifications.

Effective and Comprehensive Public Participation

O-023-001

- We strongly support an engaging and effective public process and ask that a Citizen Advisory Group be maintained through the completion of the project and be involved in early on and in all aspects of the process.

O-023-002

- We support the Community Corridor Planning process and urge you to follow the 11 Core Principles identified and ratified by Somerville residents.

Environmentally, socially, and economically just siting of the Maintenance Facility

O-023-003

- We strongly oppose to the Maintenance Facility site at Yard 8. This option has widely been rejected by Cambridge and Somerville stakeholders at public meetings. Somerville has already suffered economically, socially, and environmentally from poor public transportation infrastructure. Placing the Maintenance Facility at Yard 8 would squander many of the

O-023-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-023-002

MassDOT has reviewed and considered the "Core Community Principles" for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

O-023-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

SOMERVILLE CLIMATE ACTION

O-023-003 opportunities offered by the green line extension for economic, social, and environmental improvements.

A comprehensive inter-modal system that significantly decreases reliance on fossil fuels

O-023-004 ➢ An effective inter-modal transportation system should make it easy for riders to get to stations by bike or foot and will yield many other benefits such as health improvements for area residents. We are strong supportive of integrating the extension of the Community Path into the Green Line extension planning, design, and building process.

O-023-005 ➢ We believe there is not time to waste in extending the Green Line to Mystic Valley Parkway/Route 16 and should be designed and build at the same time as the rest of the Extension and that the system should be designed to accommodate future stations in underserved areas easily.

Green infrastructure

O-023-006 ➢ All buildings materials, technologies, and practices used in the construction of the Maintenance Facility and Rail extension should use materials and technologies that have the least detrimental ecological impact and mimic natural systems as much as possible. These include green building materials, green roofs, energy-efficient and renewable technology, and zero-waste practices. The use of these materials and technologies should be incorporated in the early in the planning phase of the project to insure a comprehensive process that all parties involved are aware of and can agree to.

Thank you for your consideration and for the work you are investing to create a sustainable future for Somerville and the rest of the Commonwealth.

Sincerely,

Vanessa Rule
Chair
Somerville Climate Action
somervilleclimateaction@gmail.com

O-023-004

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-023-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-023-006

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual designs. Detailed designs for each station, the maintenance facility, and the entire Project will be refined during the preliminary engineering phase. As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR.

SOMERVILLE COMMUNITY CORPORATION

337 Somerville Avenue, 2nd Floor
Somerville, MA 02143
Phone (617) 776-5931
Fax (617) 776-0724

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

RE: EEA #13886

Dear Secretary Bowles:

We are writing on behalf of the Somerville Community Corporation (SCC) to express our support for the Green Line Project and to recommend approval of the Draft Environmental Impact Report contingent on consideration and incorporation of proposed recommendations into the Final EIR. Because time is an important factor, we encourage you to pass the Final EIR with the allowance for supplemental addendums to this report that respond to and address community recommendations in a time appropriate manner.

O-024-001

SCC is most interested in making sure that final plans for Green Line construction reflect the needs and wants of the community. During the summer and fall of 2009, SCC worked in coalition with Groundwork Somerville, Somerville Transportation Equity Partnership, and the Somerville Community Health Agenda as part of CCP (Community Corridor Planning) to engage hundreds of residents to participate in identifying principles for land use and quality of life in Somerville along the proposed Green Line corridor. Many of these principles are directly relevant to the plans put forward by MA DOT. Below, please find the list of recommendations matched with the principles we feel are most relevant to the DEIR.

O-024-002

In addition, we would like to see MA DOT abandon proposals to locate the Maintenance Facility in Yard 8, and to develop full feasibility studies for Option L and Option H as alternative locations for the Maintenance Facility.

O-024-003

We would also like to see MA DOT develop and implement a plan to reconstruct the section of McGrath Highway that passes through Somerville in coordination with construction of the Green Line. We have worked with community members in East Somerville, an Environmental Justice community, who have fought hard to change this roadway to make it more pedestrian friendly, safe, and better integrated into the community. To this end, we would like to see the McGrath Obrien Highway converted into a Boulevard, with the elimination of the Washington Street overpass.

O-024-004

Finally, as a community based organization, we feel strongly that MA DOT should establish a participatory community process for the design-build phase of the Green Line project. We recommend MA DOT establish a community advisory committee, with broad

O-024-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-024-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-024-003

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to

O-024-004

representation of the demographic spectrum of residents making up the communities along the corridor. We encourage the establishment of a field office in Somerville to facilitate ongoing communication between residents and project staff.

O-024-005

The following Principles were established and endorsed by a diverse body of Somerville residents as part of Community Corridor Planning. The highlighted principles are those that are most directly related to recommendations included in the DEIR, each followed by specific recommendations for the final EIR.

Core Community Principles for
Neighborhood Development Along the Green Line Corridor

Community Involvement: We want to make sure residents are included on an ongoing basis in the planning, design, and zoning changes to the stations and areas around them. Youth, artists, and others should help design stations, with attention to amenities. We need an easy and clear process for residents to address problems as they come up, with ways of immediately resolving unseen impacts.

- Ensure community participation in the next phase (presumed to be done as a design/build project)
- Public involvement will help to keep decision-making public (transparency)
- Need to have a field office that residents can go to with concerns on an ongoing basis
- Need neighborhood based community groups to be involved in planning around each station.

Increase Commercial and Economic Development: We want to see the creation of squares as destinations, with careful attention to mixed use of commercial/residential reuse of buildings, and economic development to increase the tax base.

- Environmental Impact Report should address Department of Transportation (DOT) commitment to economic development
- New MA DOT should fulfill its obligation to work with Secretary of Economic Affairs to promote station location and design that promotes economic development

Improve the Green Environment: We want a safe, environmentally friendly neighborhood with more green space, trees, and gardens, reduction of noise, avoidance of light pollution, and prevention of toxic chemicals in the air.

- Minimize noise of operations
- Mitigate during construction for noise, vibration, etc.
- Involve neighborhoods affected regarding noise and vibration
- Testing should be done immediately after project begins to determine if estimates for vibration and noise done for the DEIR are accurate.
- Only permit stops of commuter trains if converted to electric
- Consider dual-mode conversion of existing commuter trains
- Encourage Walking and Biking through safe, bike/pedestrian friendly design of streets and paths around and between stations.
- Improve plans for pedestrian and bike access, as well as parking for bicycles.

ensure, to the extent feasible, consistency with planning and other projects.

O-024-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-024-005

MassDOT has reviewed and considered the "Core Community Principles" for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

- New Light Rail Vehicles (LRVs) should be designed to accommodate bicycles (like Portland LRVs)
- The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

Improve Access: We want above standard, safe access to and between stations for people with disabilities, strollers, and pedestrians in general.

Connecting Buses and Trains: We want to ensure inter-modal access between neighborhoods and stations, for new train service to be adequate and speedy, and for existing bus lines to continue to serve areas not connected by train.

- Need opportunity for future connection with other lines, such as Red Line at Porter Square.
- Several stations do not show bus stops, or nearest bus stop is located outside of station. Would be helpful to design station and alter bus route to allow for stops at the stations.

More Local Jobs: We want a fixed percentage of respectable jobs of all types with good wages and benefits for Somerville residents, from construction to permanent.

Keep and Add Local Businesses: We want locally owned, culturally diverse, clean businesses in commercial areas with employees who live in Somerville.

Keep Somerville Affordable: We want to make sure people of all economic means have the ability to afford housing and living costs, so that Somerville residents, such as child care workers, cab drivers, local business employees and others can stay here affordably.

Maintain Our Diversity: Preserve and encourage economic and ethnic diversity of residents and businesses.

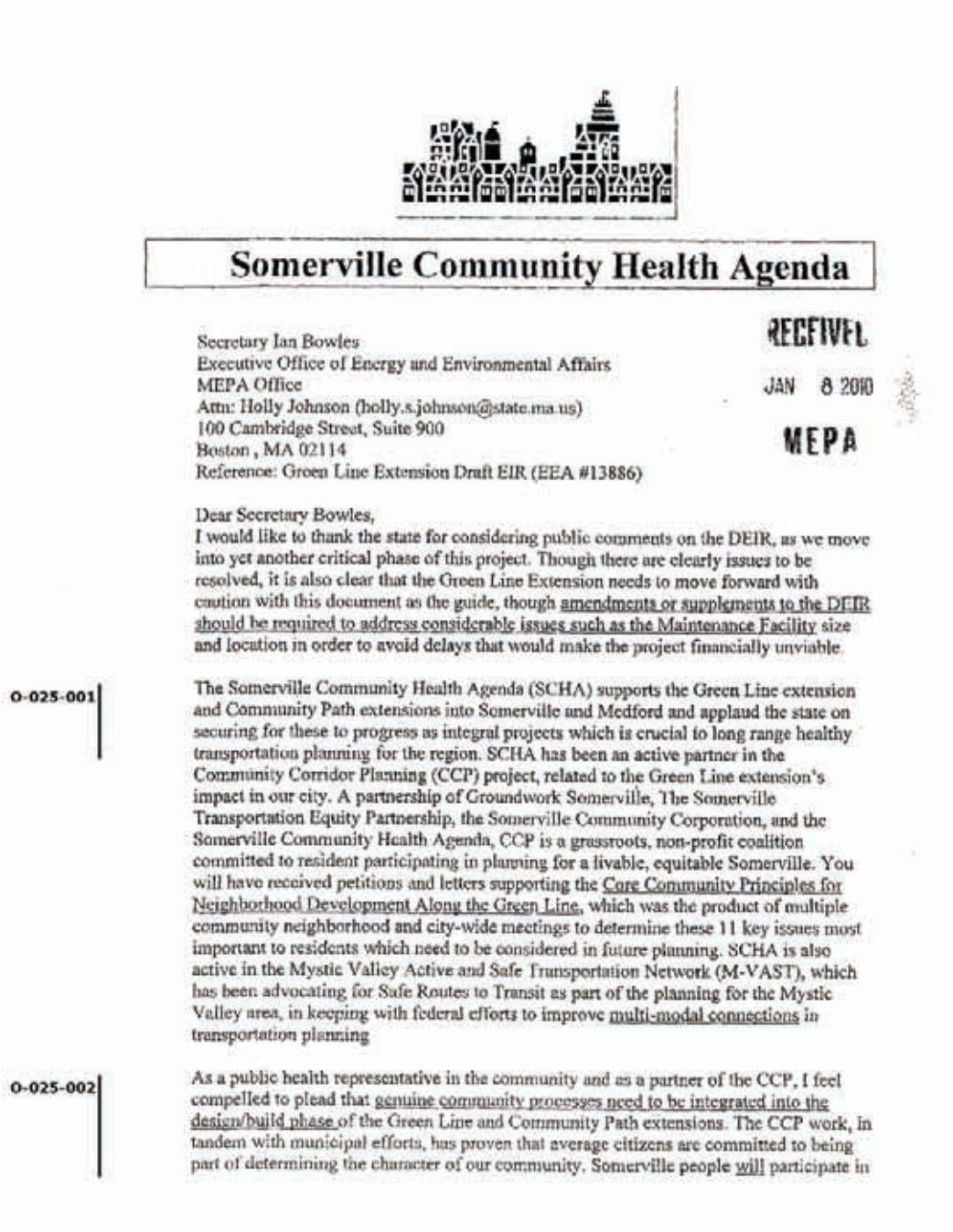
We encourage MA DOT to plan all transportation projects on the basis of guiding principles for Transit Oriented Development (TOD), smart growth and quality of live impacts.

Thanks you for your hard work and attention to community input. We appreciate your careful review.

Sincerely,

Danny LeBlanc
Chief Executive Officer

Meridith Levy
Director of Community, Power, and Resources



Somerville Community Health Agenda

RECEIVED
JAN 8 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston , MA 02114
Reference: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,
I would like to thank the state for considering public comments on the DEIR, as we move into yet another critical phase of this project. Though there are clearly issues to be resolved, it is also clear that the Green Line Extension needs to move forward with caution with this document as the guide, though amendments or supplements to the DEIR should be required to address considerable issues such as the Maintenance Facility size and location in order to avoid delays that would make the project financially unviable.

O-025-001

The Somerville Community Health Agenda (SCHA) supports the Green Line extension and Community Path extensions into Somerville and Medford and applaud the state on securing for these to progress as integral projects which is crucial to long range healthy transportation planning for the region. SCHA has been an active partner in the Community Corridor Planning (CCP) project, related to the Green Line extension's impact in our city. A partnership of Groundwork Somerville, The Somerville Transportation Equity Partnership, the Somerville Community Corporation, and the Somerville Community Health Agenda, CCP is a grassroots, non-profit coalition committed to resident participating in planning for a livable, equitable Somerville. You will have received petitions and letters supporting the Core Community Principles for Neighborhood Development Along the Green Line, which was the product of multiple community neighborhood and city-wide meetings to determine these 11 key issues most important to residents which need to be considered in future planning. SCHA is also active in the Mystic Valley Active and Safe Transportation Network (M-VAST), which has been advocating for Safe Routes to Transit as part of the planning for the Mystic Valley area, in keeping with federal efforts to improve multi-modal connections in transportation planning

O-025-002

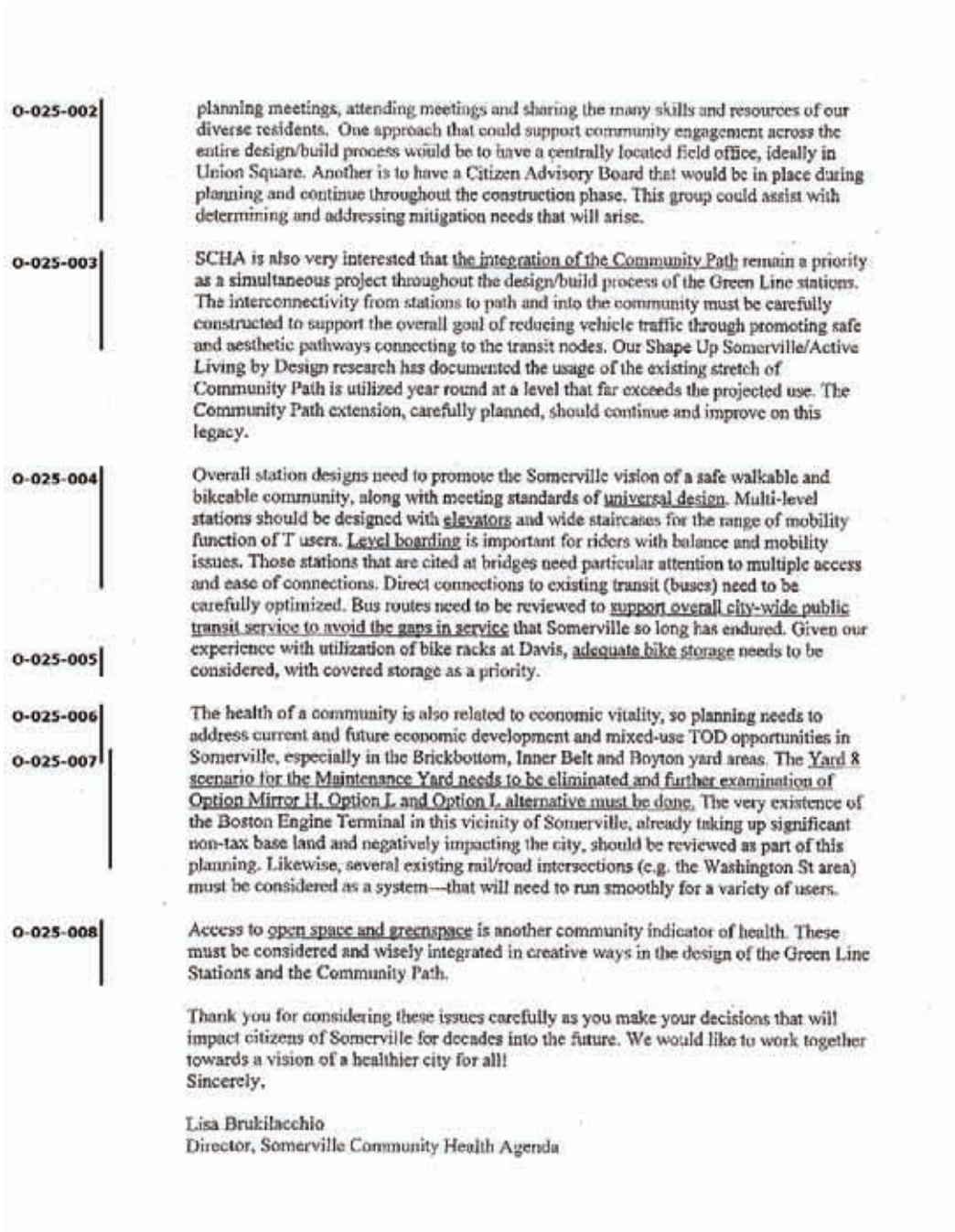
As a public health representative in the community and as a partner of the CCP, I feel compelled to plead that genuine community processes need to be integrated into the design/build phase of the Green Line and Community Path extensions. The CCP work, in tandem with municipal efforts, has proven that average citizens are committed to being part of determining the character of our community. Somerville people will participate in

O-025-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-025-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



O-025-002 planning meetings, attending meetings and sharing the many skills and resources of our diverse residents. One approach that could support community engagement across the entire design/build process would be to have a centrally located field office, ideally in Union Square. Another is to have a Citizen Advisory Board that would be in place during planning and continue throughout the construction phase. This group could assist with determining and addressing mitigation needs that will arise.

O-025-003 SCHA is also very interested that the integration of the Community Path remain a priority as a simultaneous project throughout the design/build process of the Green Line stations. The interconnectivity from stations to path and into the community must be carefully constructed to support the overall goal of reducing vehicle traffic through promoting safe and aesthetic pathways connecting to the transit nodes. Our Shape Up Somerville/Active Living by Design research has documented the usage of the existing stretch of Community Path is utilized year round at a level that far exceeds the projected use. The Community Path extension, carefully planned, should continue and improve on this legacy.

O-025-004 Overall station designs need to promote the Somerville vision of a safe walkable and bikeable community, along with meeting standards of universal design. Multi-level stations should be designed with elevators and wide staircases for the range of mobility function of T users. Level boarding is important for riders with balance and mobility issues. Those stations that are cited at bridges need particular attention to multiple access and ease of connections. Direct connections to existing transit (buses) need to be carefully optimized. Bus routes need to be reviewed to support overall city-wide public transit service to avoid the gaps in service that Somerville so long has endured. Given our

O-025-005 experience with utilization of bike racks at Davis, adequate bike storage needs to be considered, with covered storage as a priority.

O-025-006 The health of a community is also related to economic vitality, so planning needs to address current and future economic development and mixed-use TOD opportunities in

O-025-007 Somerville, especially in the Brickbottom, Inner Belt and Boyton yard areas. The Yard 8 scenario for the Maintenance Yard needs to be eliminated and further examination of Option Mirror H, Option J, and Option L alternative must be done. The very existence of the Boston Engine Terminal in this vicinity of Somerville, already taking up significant non-tax base land and negatively impacting the city, should be reviewed as part of this planning. Likewise, several existing rail/road intersections (e.g. the Washington St area) must be considered as a system—that will need to run smoothly for a variety of users.

O-025-008 Access to open space and greenspace is another community indicator of health. These must be considered and wisely integrated in creative ways in the design of the Green Line Stations and the Community Path.

Thank you for considering these issues carefully as you make your decisions that will impact citizens of Somerville for decades into the future. We would like to work together towards a vision of a healthier city for all!
Sincerely,

Lisa Brukilacchio
Director, Somerville Community Health Agenda

O-025-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-025-004

The DEIR/EA and FEIR include conceptual station designs. Designs for each station will be refined during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement as the station designs are refined.

O-025-005

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-025-006

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the

presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

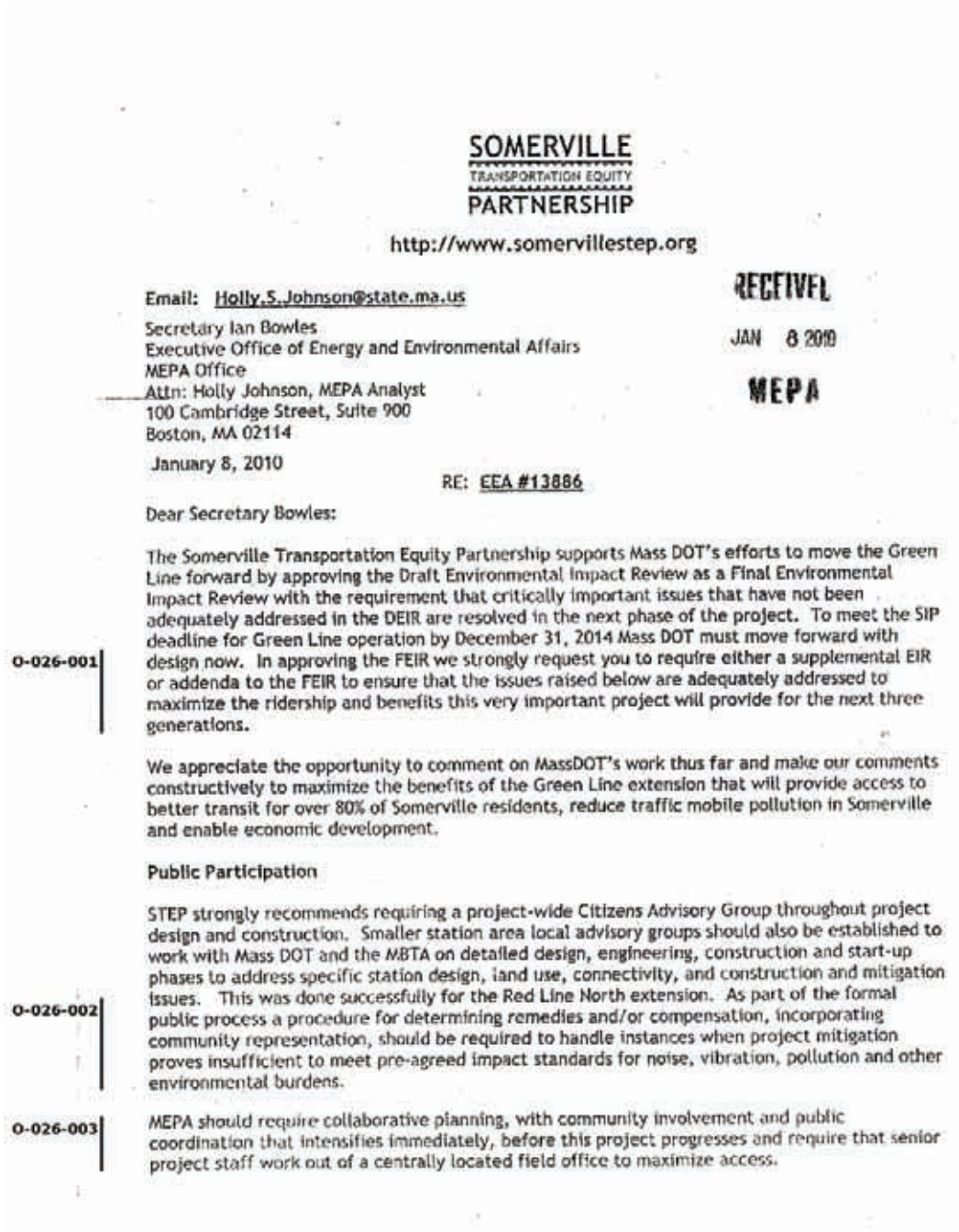
O-025-007

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-025-008

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area, which can facilitate access to open space and recreational areas.



SOMERVILLE
TRANSPORTATION EQUITY
PARTNERSHIP

http://www.somervillestep.org

Email: Holly.S.Johnson@state.ma.us

RECEIVED
JAN 8 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

January 8, 2010

RE: EEA #13886

Dear Secretary Bowles:

The Somerville Transportation Equity Partnership supports Mass DOT's efforts to move the Green Line forward by approving the Draft Environmental Impact Review as a Final Environmental Impact Review with the requirement that critically important issues that have not been adequately addressed in the DEIR are resolved in the next phase of the project. To meet the SIP deadline for Green Line operation by December 31, 2014 Mass DOT must move forward with design now. In approving the FEIR we strongly request you to require either a supplemental EIR or addenda to the FEIR to ensure that the issues raised below are adequately addressed to maximize the ridership and benefits this very important project will provide for the next three generations.

O-026-001

We appreciate the opportunity to comment on MassDOT's work thus far and make our comments constructively to maximize the benefits of the Green Line extension that will provide access to better transit for over 80% of Somerville residents, reduce traffic mobile pollution in Somerville and enable economic development.

Public Participation

STEP strongly recommends requiring a project-wide Citizens Advisory Group throughout project design and construction. Smaller station area local advisory groups should also be established to work with Mass DOT and the MBTA on detailed design, engineering, construction and start-up phases to address specific station design, land use, connectivity, and construction and mitigation issues. This was done successfully for the Red Line North extension. As part of the formal public process a procedure for determining remedies and/or compensation, incorporating community representation, should be required to handle instances when project mitigation proves insufficient to meet pre-agreed impact standards for noise, vibration, pollution and other environmental burdens.

O-026-002

MEPA should require collaborative planning, with community involvement and public coordination that intensifies immediately, before this project progresses and require that senior project staff work out of a centrally located field office to maximize access.

O-026-003

O-026-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-026-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-026-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

Maintenance Facility & Regional Environmental Justice

O-026-004 The Yard 8 Option for the Maintenance Facility should be completely eliminated from consideration. There is unanimous opposition by the cities of Somerville and Cambridge and residents of both cities to use of Yard 8 for the Maintenance Facility. This location would increase Somerville's transportation infrastructure burden, negatively impact quality of life and obstruct needed economic development of Brick Bottom/Inner Belt. Avoidance of increasing such burdens in Somerville was clearly stated in the Secretary's Certificate to conduct the DEIR but ignored by Mass DOT in advancing this location as their preferred alternative without adequately considering other locations that lessen the impact of the facility and storage tracks on the city and residents

O-026-005 We ask that you require Mass DOT to carry out **full analysis of the Option L alternatives and Option H for siting the Maintenance Facility.** Fully considering these sites can result in a solution that minimizes land-takings and the impact on residents and future economic development. As part of this analysis we ask consideration from Mass DOT to minimize the number of cars stored near the Maintenance Facility and consider covering some of the storage tracks with a green roof that will increase open space in the city and enable possible air rights development in the future. This would reduce the negative impact of the storage tracks. While initially adding cost to the storage tracks construction, covered trains are easier to maintain, reduces noise for abutters, improves the condition of vehicles and turns a burden into an amenity_.

Station Design & Siting

O-026-006 Designing and constructing the Mystic Valley Parkway / Route 16 terminus should be carried out at the same time as the rest of the project to serve the large number of riders from Medford, Somerville and East Arlington who would board the Green Line at the Route 16 station.

O-026-007 Design of the Green Line stations should seamlessly connect all modes of transportation, including current and re-routed buses. Station designs should accommodate bus drop off and pick-up (for example, using bus pull-out pockets or curb extensions) with maximum integration of transit modes and minimal street disruption. Mass DOT should work with the communities to align bus routes and connect to Green Line stations at the start of Green Line service, as was done for the Red Line northwest extension.

O-026-008 Where possible station headhouses should be located on major streets and provide easy access for pedestrians and bicyclists. Design should enable access from both sides of the street and in all directions of travel. No parking should be provided at stations, but the design should permit car drop off. Working with the communities it is recommended to widen sidewalks leading to stations and provide safe cross walks where needed.

STEP agrees with the general locations selected for the stations in the DEIR, but we believe that the preliminary station designs do not maximize ease of access particularly where riders will access stations at overpass bridges. Mass DOT should work with community representatives to reconsider station designs to maximize ease of access, efficiency and lower construction costs. We believe that pedestrian and bus access to stations and high station visibility from major streets should be prioritized.

O-026-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-026-005

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-026-006

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension

O-026-009 Stations should provide adequate bicycle storage calculated based on a percentage of boardings at the stations. Bicycle storage should be sheltered from the elements, especially at Route 16, Lowell Street, and Union Square stations, to enable all-weather access.

O-026-010 We urge you to require that that Mass DOT follow the Federal Transit Administration's proposed policy change to bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. [Federal Register: November 13, 2009 (Volume 74, Number 218), http://edocket.access.gpo.gov/2009/E9-27240.htm.] This will maximize access to the stations and increase ridership. It will also increase the cost effectiveness of the project.

O-026-011 Stations should be constructed to meet ADA-compliant level boarding of low-floor Green Line cars that have sliding rather than accordion doors currently used on Green Line cars.

O-026-012 Station and station area designs must be developed through a formal and interactive community participation process to ensure that they fit into existing neighborhoods and support appropriate future mixed use development. Takings should be minimized to save the state money and to preserve land uses.

O-026-013 Now that construction of the relocated Lechmere Station is included in the project, station design should utilize the East Cambridge Planning Team's pedestrian-friendly design ideas and re-use suggestions for the old Lechmere Station.

O-026-014 The terminus station at Route 16 should incorporate the Medford Green Line Neighborhood Alliance's ideas for minimizing takings.

O-026-015 For the overall project station design and siting should involve active participation of knowledgeable transportation accessibility advocates to ensure accessibility requirements are fully addressed.

Community Path Integration & Preservation of Corridor Transit Potential

O-026-016 It is critical that the Community Path and its important station connections be designed and constructed simultaneously with the Green Line extension to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path. Delaying construction of the path reduces access to stations and increases the cost of construction once the extension is built. It should be noted that boarding estimates in the DEIR do not adequately reflect the extensive use in Somerville of the Community Path in increasing boardings at the Davis Square Red Line station.

O-026-017

O-026-018 It is critically important to require that track design and construction be done to enable adding future stations - between Lechmere and Washington Street / Union Square, between College Avenue and Route 16, and along a future Green Line extension to Porter Square that could serve both Cambridge and Somerville neighborhoods.

Economic Development & Regional Corridor Planning

O-026-019 Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a neighborhood and local business friendly surface boulevard serving pedestrians and bicyclists as well as cars. Improved connectivity between both sides of Route 28 is crucial for economic development, pedestrian station access, and improved quality of life.

Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

O-026-007

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-026-008

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for

O-026-019 Coordinate the Green Line extension with calming of the McGrath/O'Brien Highway in Cambridge and Somerville. In Somerville this would involve eliminating the Washington St. Overpass to turn the concrete elevated highway into an at grade boulevard that would connect Union Square to East Somerville and facilitate economic development for the area. The condition of the overpass requires reconstruction and funding has been identified in the Boston MPO RTP. The community does not want this overpass reconstructed. Design of an at grade boulevard should be carried out while the Green Line is being designed. In Cambridge traffic calming will be required along McGrath-O'Brien Highway to accommodate pedestrians going to the relocated Lechmere Station.

O-026-020 The design and siting of the maintenance facility should not prevent development of a street grid in Inner Belt/Brick Bottom that enables access from North Point, McGrath-O'Brian Highway and Washington St.

O-026-021 State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts. Maintaining diversity in people and businesses while improving the natural environment is critical. Access to open space and greenery promotes health.

The Somerville Transportation Equity Partnership has been strongly committed to making the Green Line extension a reality. We are very pleased to see this project moving forward after years of delay. As the Green Line moves forward we are seeking that the best decisions are made through a collaborative process to maximize the environmental, transportation and economic benefits of the Green Line extensions.

Sincerely,

Ellin Reisner, President
Somerville Transportation Equity Partnership

Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-026-009

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-026-010

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-026-011

The Green Line Extension Project is being designed for fully accessible stations in compliance with ADA requirements. However, the issue of systemwide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this Project.

O-026-012

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality. DEIR/EA Section 5.3 describes the Project's potential temporary and permanent acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts.

O-026-013

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the

preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

O-026-014

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

O-026-015

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-026-016

MassDOT has committed to complete the final design of the proposed

Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-026-017

The 2008 ridership model was developed to include projects identified in the Regional Transportation Plan at that time.

O-026-018

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-026-019

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

O-026-020

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative. The preferred site, Option L,

does not prevent development of a new street grid in the Inner Belt and Brickbottom communities.

O-026-021

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Tufts
UNIVERSITY
University Relations

Mary Jeka
Vice President

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA number #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Green Line Extension Project (EEA # 13886)

Dear Secretary Bowles:

On behalf of Tufts University ("Tufts" or "the University"), I submit the following comments on the Draft Environmental Impact Report/Environmental Assessment (DEIR) for the Green Line Extension Project (the "Project"), EEA Number 13886.

O-027-001 Tufts is a strong supporter of the Project. We believe that the Project will provide an extremely vital transportation link between Medford/Somerville and downtown Boston, as well as the rest of the MBTA system, and will reduce vehicle travel and improve air quality in the region. However, we would like to comment on some details of the Project that, in our opinion, were not adequately addressed by the DEIR, and require further review. We respectfully request that the Secretary require

O-027-002 either a Final Environmental Impact Report (FEIR) or, at a minimum, a Supplemental Environmental Impact Report that addresses these issues.

I. Vehicular and Pedestrian Traffic

In Tufts' view, the major concerns relating to the proposed College Avenue station relate to traffic flow, pedestrian safety and parking in the adjacent area, particularly if the College Avenue station is the terminus of the Green Line.

Vehicular Traffic

O-027-003 Table 4.6-3 of the DEIR identifies the intersection of Boston Avenue at College Avenue as operating at a Level of Service (LOS) D during both the morning and afternoon peaks, and estimates an average delay of 55 seconds per vehicle during the morning rush and 47 seconds per vehicle during the evening rush. We believe that the current vehicle delay estimates for rush hour may well be understated, particularly heading west on College Avenue during the morning rush hour, when vehicles often are backed up for two or three light-cycles.

O-027-004 Table 5.5-5 anticipates only 40 peak hour "pick-up/drop-offs" at the College Avenue Station. The DEIR assumes that (i) each station will only attract riders within a one-mile radius and (ii) only five percent of riders at each station will arrive via drop-off/pick-up (as opposed to

Ballou Hall, Medford, MA 02155 | TEL: 617.627.4350 | FAX: 617.627.4350

O-027-001
MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

O-027-002
In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

O-027-003
DEIR/EA Table 4.6-3 presents a summary of overall intersection results for each study area intersection and accurately depict overall traffic operations at the intersection. Results by intersection movement are provided in Appendix F to the DEIR/EA. The results by movement match the commenter's observations regarding long delays heading west on College Avenue during the morning. These delays are included in the calculation of the overall intersection operations.

O-027-004
The assumption that each station will only attract riders within a one-mile radius is related only to the catchment area for pedestrians. For those that can arrive by other means (including parking as appropriate by alternative) the catchment area includes the 164 communities within the CTPS regional travel demand model. This also includes anyone currently using another MBTA service who might be better served by the green line.

The assumption related to pick-up/drop-off activity is based on a spring 2007 passenger survey conducted by CTPS. The intent of the survey was to understand the use by station and mode of the drop-offs at transit stations across Eastern Massachusetts. Within the urban core, the

O-027-004

walking, cycling or bus). We are concerned that these assumptions may not apply to a terminus station, and that the impact of pick-ups and drop-offs on both vehicular and pedestrian traffic is therefore understated. Additional study (including a survey of ridership at other Green Line terminus stations like Boston College and Heath Street) is required.

O-027-005

In particular, we believe that the DEIR does not adequately address the impact of vehicular traffic coming south on Boston Avenue. We are concerned that commuters coming from Medford and the north will drive south on Boston Avenue and be dropped off adjacent to the College Avenue station, and that many vehicles will then return home either by making a U-turn on Boston Avenue or by turning left onto College Avenue. This will have a significant adverse effect on both pedestrian and vehicular traffic at the Boston Avenue/College Avenue intersection, and will materially increase vehicular traffic in the surrounding area.

O-027-006

The location of drop-off areas needs to be more carefully studied. The traffic plan should provide a drop-off area for southbound vehicles on Boston Avenue. It may be possible to use the bus stops on Boston Avenue as drop-off points. The study should consider moving the bus stops and drop-off points away from the intersection of College and Boston Avenues to ease traffic and pedestrian congestion and provide for greater safety.

O-027-007

The DEIR proposes widening the College Avenue bridge to add a dedicated right-turn lane, but the ability of cars to make right turns onto the northbound lane of Boston Avenue could be significantly hampered by pedestrian traffic accessing the station. In addition, the station headhouse as currently designed may hamper visibility for motorists making right hand turns.

O-027-008

Unless cars are prohibited from making right turns on a red signal, pedestrian safety at the intersection may be significantly affected.

Pedestrian Traffic

The College Avenue bridge is the only pedestrian connection between the main portion of the Tufts campus on the western side of the rail right of way and the University facilities on the eastern side of the right of way, including Halligan Hall, Cousens Gymnasium, the University athletic facilities, Gantcher Sports and Convocation Center, Hamilton Pool, the Eliot-Pearson School and 80 George Street, which is the headquarters of two major administrative departments of the University. A significant proportion of the 7,600 students, faculty and staff at Tufts' Medford/Somerville campus cross the intersection of College Avenue and Boston Avenue daily. The DEIR designates a Pedestrian Level of Service (PLOS) of E for the intersection during both the morning and evening rush hours, although the average delays are between 55 and 59 seconds, which is very close to a PLOS of F (60 seconds or more) (Table 4.6-6). Nevertheless, Table 5.5-19 does not include any proposed pedestrian mitigation measures for the Boston Avenue/College Avenue intersection.

O-027-009

O-027-010

We urge the EOT, in designing the College Avenue Station and adjacent sidewalks and plazas, to take into account the normal movement of Tufts students, staff and visitors between the east and west sides of the rail right of way and across the College Avenue/Boston Avenue intersection. Given the volume of pedestrian traffic at the intersection, a pedestrian bridge should be seriously considered as an option.

survey results indicate surface rail stops have between 3 and 7 percent of their daily boardings originating from drop-offs. The average, 5 percent, was used in the DEIR/EA analysis. Additional information related to the survey can be found in the transportation appendix to the DEIR/EA.

A more detailed description of how College Avenue was modeled as a terminus station is provided in the FEIR.

O-027-005

The analysis assumes that 65 percent of pick-up/drop-off activity arrives via Boston Avenue from the North. This is roughly in line with the existing percentage of southbound versus northbound traffic. For locations that see an adverse impact due to the pick-up/drop off activity, mitigation to offset this impact has been recommended.

O-027-006

The provision and location of designated pick-up/drop-off areas will be further studied as part of the preliminary engineering associated with the stations.

O-027-007

The pedestrian phase at this traffic signal is an exclusive pedestrian phase, where pedestrians are only provided the walk signal when all approaches have a red indication. In this case, right turning traffic would legally have to yield to the pedestrian in a crosswalk. Additional considerations for pedestrians and potential sight distance issues associated with the College Avenue Station are being further evaluated as part of the preliminary engineering phase of the Project.

O-027-008

O-027-010 In light of the foregoing concerns, we believe that the FEIR or Supplemental Report needs to provide for specific measures to ensure pedestrian safety adjacent to the College Avenue Station.

II. Parking

O-027-011 Further study of the current parking conditions and anticipated changes in Medford parking regulations should be done in order to insure optimal operation of the College Avenue Station and its environs. We fully expect the City of Medford to implement a resident parking program before a new transit station opens, limiting the availability of on-street parking to commuters. Spaces in Tufts' parking lots are essential to the parking management program operated by the University in order to comply with applicable zoning agreements and neighborhood concerns. Limiting commuter parking on adjacent streets and in University lots will require administrative action (and enforcement costs) on the part of both the City of Medford and the University.

III. Noise and Vibration

O-027-012 As noted in Section 4.9.5 of the DEIR, there are a number of Tufts buildings adjacent to the rail right of way on Boston Avenue and Colby Street. Many of these buildings house scientific research extremely sensitive to any increase in the amount or frequency of noise or vibration. Some adverse impact can be anticipated because the new tracks will be closer to the adjacent properties than the existing tracks. Figures 5.7-4 and 5.8-4 do not identify all of the University buildings that will be affected by additional noise and vibration, and suggest that no effort is expected to be made as part of the Project to specifically mitigate those effects. For example, research conducted in the Psychology Department building at 490 Boston Avenue and in the Bray Laboratory at 504 Boston Avenue could be significantly impacted by the proposed project. Other University buildings that could be affected by additional noise and vibration include 177 and 179 College Avenue and 474 Boston Avenue (Curtis Hall). In addition, the University's master plan envisions the Boston Avenue corridor as a major research center for the University; for example, the University has developed plans to construct an Integrated Research Laboratory at 550-574 Boston Avenue at some point in the future.

The EOT should more carefully study the effects of noise and vibration on University buildings adjacent to the rail right of way, and should commit to make whatever efforts are reasonably necessary to mitigate adverse impacts on all adjacent University properties, taking into account planned future uses for those properties. Noise and vibration controls at these locations should be appropriate for protecting sensitive research facilities.

IV. Land Acquisitions and Easements

O-027-013 The DEIR does not provide adequate information on whether any takings would be required on the north side of the Harvard Street rail overpass. The University owns property on both the northeast and northwest sides of that overpass, at 4 Colby Street and 574 Boston Avenue.

Changes to the station headhouse are being reviewed as part of the preliminary engineering phase of the Project.

O-027-009

Pedestrian levels of service (PLOS) at the intersection of Boston Avenue and College Avenue are not anticipated to degrade due to the proposed project, therefore no mitigation is recommended. The proposed project includes the provision of a signalized pedestrian crossing on College Avenue northeast of the intersection. If warranted, a signalized crossing at that location would help to shorten the time a pedestrian would have to wait to cross College Avenue, thereby improving overall PLOS at the Boston Avenue/College Avenue intersection.

O-027-010

The conceptual plan for the College Avenue Station will be further developed during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-027-011

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

O-027-012

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate,

O-027-013 Figure 5.2-6 identifies takings on the southwest side of the College Avenue overpass (behind Curtis Hall) and on the northeast side of the overpass. More information is needed on the planned extent of these takings, whether they are sufficient to accommodate the planned widening of the College Avenue bridge, and how University operations will be affected by the takings.

V. Design Issues

O-027-014 The proposed College Avenue Station design (Figure 3.7-22) contemplates a station entry area that extends to the College Avenue bridge. We believe that the area would be better served by moving the entry area back approximately 40 feet so that pedestrian traffic can circulate freely through the plaza area. This change would also improve sightlines for vehicles making a right turn from the College Avenue Bridge to the northbound lane of Boston Avenue, but can be implemented in a way that does not require extending the Green Line tracks further to the north.

O-027-015 Section 3.7.3.6 indicates that handicap accessibility (given the eight percent grade along the College Avenue Bridge) was taken into account in designing the station, but does not provide any detail as to how this issue was addressed.

O-027-016 There is currently a 48-inch water main suspended from the north side of the College Avenue bridge. It is not clear from the DEIR whether the MWRA expects to relocate the water main as part of the Project, and if so, where the rerouted water main will be located.

O-027-017 We believe that an effort should be made to integrate the final design of the College Avenue station into the surrounding neighborhood, allowing the station to serve as a gateway to the area.

VI. Construction Mitigation

O-027-018 Section 3.7.6 lists the criteria that will be required for traffic management and construction staging. We agree with these criteria but would like to see more information on how they will be applied to the construction of the College Avenue station. In particular, we would emphasize that, because the College Avenue bridge is the only available means for Tufts students and staff to move between the west and east side of the rail right of way, adequate and safe pedestrian access cannot be interrupted. Plans for vehicular and emergency access to the University buildings adjacent to the College Avenue bridge should also be specifically addressed.

VII. Stormwater Discharge

O-027-019 Section 5.9.4 contemplates that stormwater would be discharged by underdrains installed beneath the rail right of way. The DEIR does not address how existing flooding problems will be mitigated as part of the Project. Two such areas adjacent to the University are beneath the Harvard Street rail overpass and behind 474 Boston Avenue (Curtis Hall). These issues (and similar issues in other parts of the Project) should be specifically addressed.

minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-027-013

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

O-027-014

The conceptual plan for the College Avenue Station will be further developed during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

O-027-015

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and

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Secretary Ian Bowles
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January 8, 2010

VIII. Selection of a Preferred Alternative

O-027-020 The DEIR identifies as its "proposed project" ending the Green Line at College Avenue, with a possible future extension to Mystic Valley Parkway/Route 16 (the "preferred alternative"). We believe the EOT should more carefully study design alternatives that would allow extending the Green Line to Mystic Valley Parkway/Route 16 that minimize the impact on the surrounding residential neighborhoods and do not require a taking of the buildings at 200 and 222 Boston Avenue. Such an extension will decrease the potential adverse impacts on traffic and pedestrian safety at the College Avenue/Boston Avenue intersection, and will increase ridership and potential environmental benefits.

O-027-021 We are strongly opposed to any taking of 200 Boston Avenue, not only because of the expense of condemnation and loss of tax revenues, but also because of the significant effect such a taking would have on the University. The University already maintains research facilities in the building and plans to acquire substantial additional space there for laboratory use beginning in 2011. Any estimate of the cost of a taking must include payment for substantial leasehold improvements made by the University as well as relocation of our research tenants. We

O-027-022 therefore believe that the Secretary should require additional study on how the noise and vibration impact on 200 Boston Avenue will be mitigated if the Green Line is extended to Route 16, based on a presumption that the building will not be taken.

Tufts University wishes to reiterate its support for the Project. We hope that the issues we have raised can be fully addressed by the EOT in a Final Environmental Impact Report so that the Project may move forward as soon as possible. Thank you for the opportunity to review and comment on this project.

Sincerely,

Mary R. Jeka
Vice President for University Relations
Tufts University

stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-027-016

MassDOT will coordinate with utilities providers to minimize impacts to existing utility lines. Utilities on bridges identified for reconstruction would be rebuilt with the bridges.

O-027-017

Please see response to Comment O-027-015.

O-027-018

During preliminary engineering detailed construction management plans will be developed.

O-027-019

Project drainage improvements will address stormwater management within the Project right-of-way, but not adjacent streets and properties. Exceptions may exist where street reconfigurations are required for the Project. These issues will be considered further during preliminary engineering.

O-027-020

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input

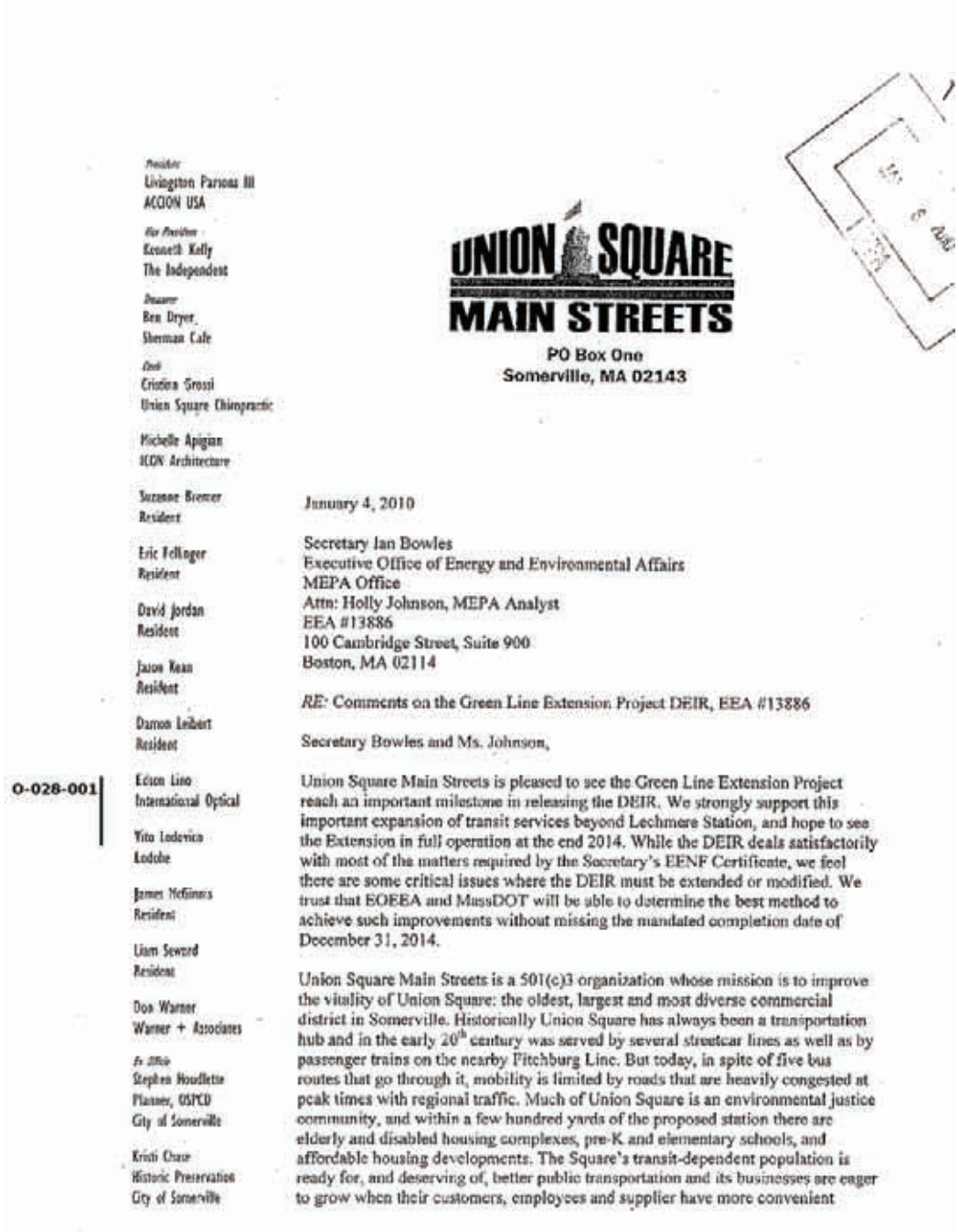
on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-027-021

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. 200 Boston Avenue would not be acquired for the Proposed Project and not building impacts are anticipated. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-027-022

Please see response to Comment O-027-021.



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The Independent

Treasurer
Ben Dryer
Sherman Cafe

Clerk
Cristina Grossi
Union Square Chiropractic

Michelle Apigian
ICON Architecture

Suzanne Brenner
Resident

Eric Fellinger
Resident

David Jordan
Resident

Jason Kean
Resident

Damon Leibert
Resident

O-028-001

Edson Lino
International Optical

Vito Lodovico
Lodobe

James McGinnis
Resident

Liam Seward
Resident

Don Warner
Warner + Associates

Ex Officio
Stephen Houdlette
Planner, OSPCD
City of Somerville

Kristi Chase
Historic Preservation
City of Somerville

UNION SQUARE
MAIN STREETS

PO Box One
Somerville, MA 02143

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Comments on the Green Line Extension Project DEIR, EEA #13886

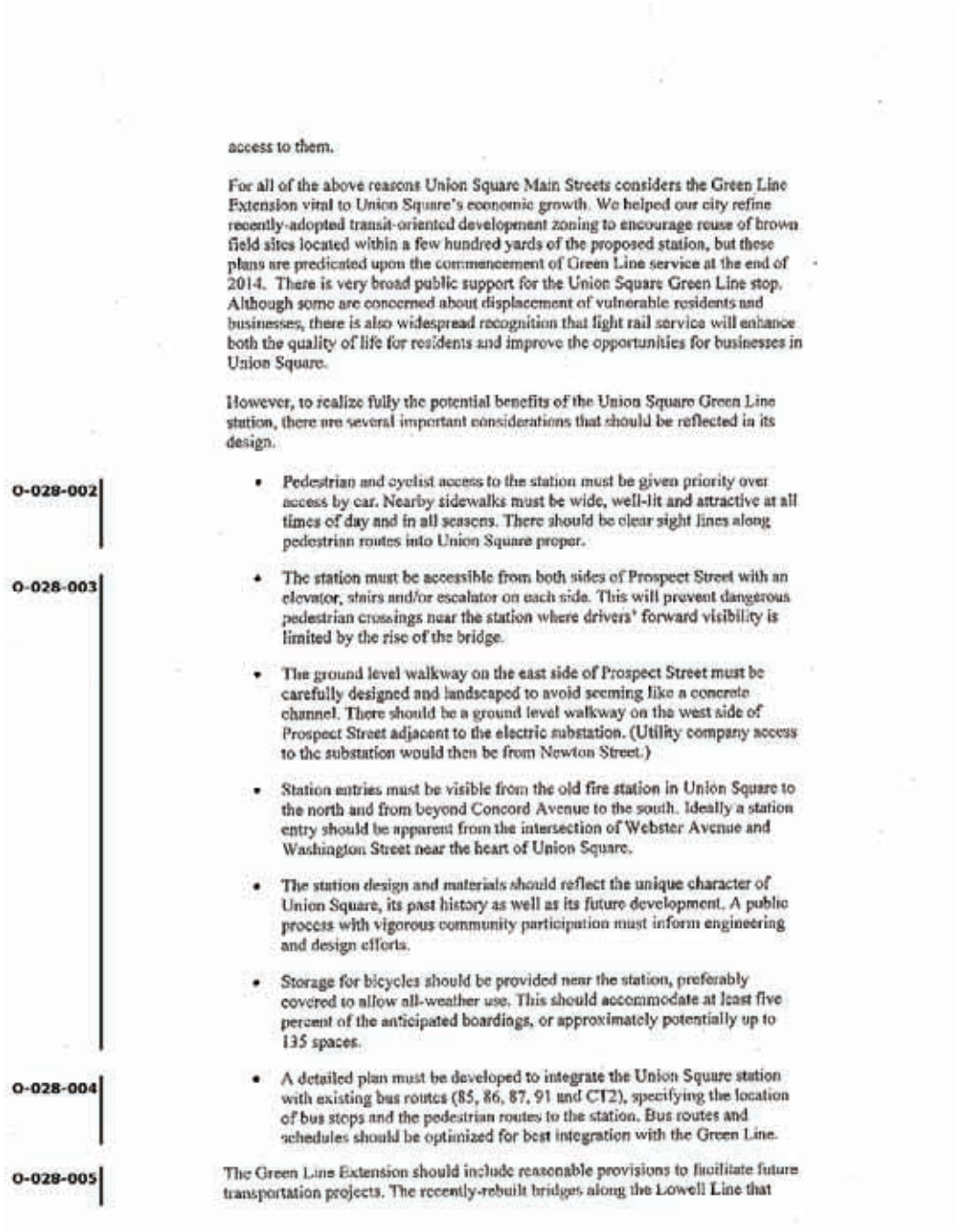
Secretary Bowles and Ms. Johnson,

Union Square Main Streets is pleased to see the Green Line Extension Project reach an important milestone in releasing the DEIR. We strongly support this important expansion of transit services beyond Lechmere Station, and hope to see the Extension in full operation at the end 2014. While the DEIR deals satisfactorily with most of the matters required by the Secretary's EENF Certificate, we feel there are some critical issues where the DEIR must be extended or modified. We trust that EOEEA and MassDOT will be able to determine the best method to achieve such improvements without missing the mandated completion date of December 31, 2014.

Union Square Main Streets is a 501(c)3 organization whose mission is to improve the vitality of Union Square: the oldest, largest and most diverse commercial district in Somerville. Historically Union Square has always been a transportation hub and in the early 20th century was served by several streetcar lines as well as by passenger trains on the nearby Fitchburg Line. But today, in spite of five bus routes that go through it, mobility is limited by roads that are heavily congested at peak times with regional traffic. Much of Union Square is an environmental justice community, and within a few hundred yards of the proposed station there are elderly and disabled housing complexes, pre-K and elementary schools, and affordable housing developments. The Square's transit-dependent population is ready for, and deserving of, better public transportation and its businesses are eager to grow when their customers, employees and supplier have more convenient

O-028-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.



access to them.

For all of the above reasons Union Square Main Streets considers the Green Line Extension vital to Union Square's economic growth. We helped our city refine recently-adopted transit-oriented development zoning to encourage reuse of brown field sites located within a few hundred yards of the proposed station, but these plans are predicated upon the commencement of Green Line service at the end of 2014. There is very broad public support for the Union Square Green Line stop. Although some are concerned about displacement of vulnerable residents and businesses, there is also widespread recognition that light rail service will enhance both the quality of life for residents and improve the opportunities for businesses in Union Square.

However, to realize fully the potential benefits of the Union Square Green Line station, there are several important considerations that should be reflected in its design.

O-028-002

- Pedestrian and cyclist access to the station must be given priority over access by car. Nearby sidewalks must be wide, well-lit and attractive at all times of day and in all seasons. There should be clear sight lines along pedestrian routes into Union Square proper.

O-028-003

- The station must be accessible from both sides of Prospect Street with an elevator, stairs and/or escalator on each side. This will prevent dangerous pedestrian crossings near the station where drivers' forward visibility is limited by the rise of the bridge.
- The ground level walkway on the east side of Prospect Street must be carefully designed and landscaped to avoid seeming like a concrete channel. There should be a ground level walkway on the west side of Prospect Street adjacent to the electric substation. (Utility company access to the substation would then be from Newton Street.)
- Station entries must be visible from the old fire station in Union Square to the north and from beyond Concord Avenue to the south. Ideally a station entry should be apparent from the intersection of Webster Avenue and Washington Street near the heart of Union Square.
- The station design and materials should reflect the unique character of Union Square, its past history as well as its future development. A public process with vigorous community participation must inform engineering and design efforts.
- Storage for bicycles should be provided near the station, preferably covered to allow all-weather use. This should accommodate at least five percent of the anticipated boardings, or approximately potentially up to 135 spaces.

O-028-004

- A detailed plan must be developed to integrate the Union Square station with existing bus routes (85, 86, 87, 91 and CT2), specifying the location of bus stops and the pedestrian routes to the station. Bus routes and schedules should be optimized for best integration with the Green Line.

O-028-005

The Green Line Extension should include reasonable provisions to facilitate future transportation projects. The recently-rebuilt bridges along the Lowell Line that

O-028-002

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

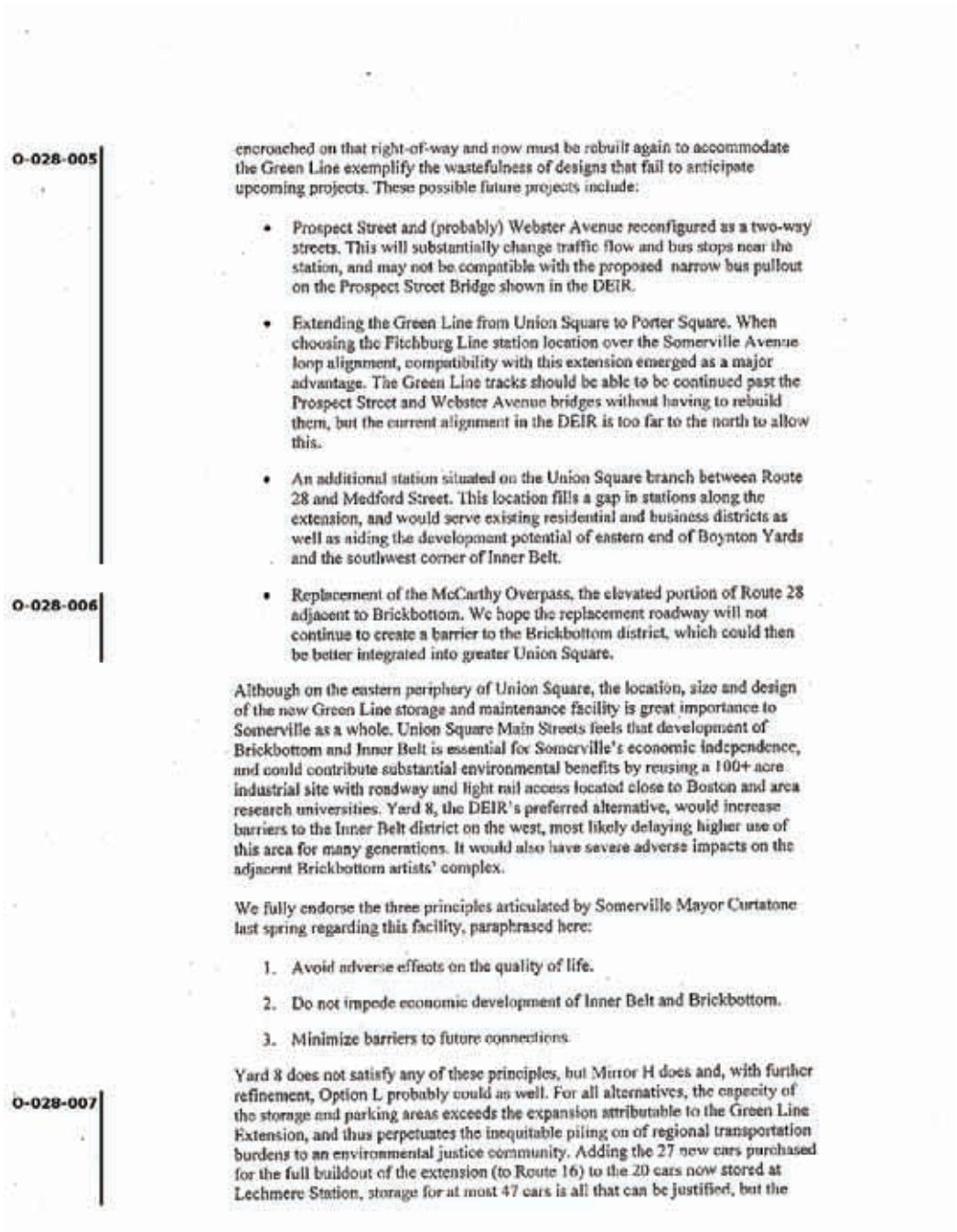
In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-028-003

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-028-004

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work



O-028-005

encroached on that right-of-way and now must be rebuilt again to accommodate the Green Line exemplify the wastefulness of designs that fail to anticipate upcoming projects. These possible future projects include:

- Prospect Street and (probably) Webster Avenue reconfigured as a two-way streets. This will substantially change traffic flow and bus stops near the station, and may not be compatible with the proposed narrow bus pullout on the Prospect Street Bridge shown in the DEIR.
- Extending the Green Line from Union Square to Porter Square. When choosing the Fitchburg Line station location over the Somerville Avenue loop alignment, compatibility with this extension emerged as a major advantage. The Green Line tracks should be able to be continued past the Prospect Street and Webster Avenue bridges without having to rebuild them, but the current alignment in the DEIR is too far to the north to allow this.
- An additional station situated on the Union Square branch between Route 28 and Medford Street. This location fills a gap in stations along the extension, and would serve existing residential and business districts as well as aiding the development potential of eastern end of Boynton Yards and the southwest corner of Inner Belt.

O-028-006

- Replacement of the McCarthy Overpass, the elevated portion of Route 28 adjacent to Brickbottom. We hope the replacement roadway will not continue to create a barrier to the Brickbottom district, which could then be better integrated into greater Union Square.

Although on the eastern periphery of Union Square, the location, size and design of the new Green Line storage and maintenance facility is great importance to Somerville as a whole. Union Square Main Streets feels that development of Brickbottom and Inner Belt is essential for Somerville's economic independence, and could contribute substantial environmental benefits by reusing a 100+ acre industrial site with roadway and light rail access located close to Boston and area research universities. Yard 8, the DEIR's preferred alternative, would increase barriers to the Inner Belt district on the west, most likely delaying higher use of this area for many generations. It would also have severe adverse impacts on the adjacent Brickbottom artists' complex.

We fully endorse the three principles articulated by Somerville Mayor Curtatone last spring regarding this facility, paraphrased here:

1. Avoid adverse effects on the quality of life.
2. Do not impede economic development of Inner Belt and Brickbottom.
3. Minimize barriers to future connections.

O-028-007

Yard 8 does not satisfy any of these principles, but Mirror H does and, with further refinement, Option L probably could as well. For all alternatives, the capacity of the storage and parking areas exceeds the expansion attributable to the Green Line Extension, and thus perpetuates the inequitable piling on of regional transportation burdens to an environmental justice community. Adding the 27 new cars purchased for the full buildout of the extension (to Route 16) to the 20 cars now stored at Lechmere Station, storage for at most 47 cars is all that can be justified, but the

with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-028-005

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

Additionally, as the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-028-006

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects that are not part of the Green Line Extension Project.

O-028-007

DEIR asks for 72 to 80 cars which does not seem needed and may not be the best use finacial resources. Land within the 43 acre Boston Engine Terminal in Inner Belt should be used first to the fullest extent possible to avoid taking any more Somerville property for additional low-value, tax-exempt maintenance and storage purposes.

O-028-008

There is a great deal of additional study and community input required to finalize the maintenance facility design, and this should be conducted in parallel with preliminary engineering for the rest of the Green Line Extension. However this is done -- via a Supplemental EIR for the maintenance facility, an addendum to the EIR, or using the MEPA Section 11.09 Special Review Procedure -- it should not be an excuse to further delay this project.

O-028-009

Although we recognize the funding challenges facing the Commonwealth, it would truly be a false economy to fail to construct the entire Green Line Extension to Mystic Valley Parkway / Route 16. The eleventh-hour truncation of the Medford branch lessens air quality benefits, and arguably does not meet the SIP requirement to serve Medford Hillside. We also believe the Community Path should be designed and constructed at the same time as the Green Line Extension. As experience at Davis Square has shown, the Path will be a very cost-effective way to increase ridership on the Green Line Extension.

O-028-010

O-028-011

A final but important request is that an effective Citizen Advisory Committee should be created for the project as a whole, and a separate CAC established for the Union Square station and vicinity. While Somerville in general has been interested and engaged by the Green Line Extension, Union Square has been doubly so. The residents and businesses here are eager to help produce the best possible design for our station within project schedule and budget constraints. We look forward to working with the project team to design a Union Square station that exceeds everyone's expectations and provides the highest return on the Commonwealth's investment.

On behalf of the Board of Directors,

Livingston Parsons III
President

O-028-007

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

O-028-008

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-028-009

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

O-028-010

MassDOT has committed to complete the final design of the proposed

Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-028-011

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

UNIVERSITY PLACE CONDOMINIUM TRUST
72 - 86 Newbern Avenue, Medford MA 02155

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs

Dear Secretary Bowles,

Thank you for the opportunity to provide some comments on the MBTA Green Line Extension Noise and Vibration Technical Report. We are responding on behalf of the residents of University Place Condominiums (UPC) in Medford, MA. We are 48 people living in a block-long brick building at the end of Newbern Avenue, directly next to the commuter rail tracks. We are parallel to, and 3 blocks over from, 7/9 Winchester Place, which is identified as "Long-term noise Site 7" in Figure 27 of Appendix A-4 of the report. Although we have not had an opportunity to discuss the report with the 14 neighbors who live across the street, we anticipate that they would share similar concerns.

We have the following comments:

Noise:

O-029-001 O-029-002
The report indicates UPC will fall into a severe impact area under the current plan, especially with the commuter rail expected to move even closer to our building and neighborhood. The more frequent and additional noise from the Green Line, even at a lower decibel, will further affect the neighborhood because these trains will be running more often. We have lived with the noise and the rumble from the commuter rail and have managed to adapt. But the Green Line will certainly increase the overall noise burden. Finally, the current report does not appear to address constructive noise interference when both the Green Line and commuter rail overlap the neighborhood, which is likely to be louder than any single individual measurement.

O-029-003
We therefore request that noise mitigation walls be required to mitigate noise at or below the current noise levels. A follow up report of the impacts post construction should be completed to prove that mitigation efforts have proven successful. This should guarantee a reasonable quality of life for the residents outside of the building. For those residents who are likely to suffer additional interior burdens, measurements should be made indoors and windows should be offered, at no cost to the residents, to help minimize interior noise, as has been done with airport projects. Ideally the building should be retrofitted with double pain windows to dampen the increased noise.

Vibration:

O-029-004
The report indicates UPC will also fall under a severe impact from vibration. Although advanced (current) rail technology is beyond our understanding at this time, it appears that this is being addressed through various technologies. One of our main concerns is the brick structure of our building and the affect on it from additional Green Line and/or rail traffic. The report does not seem to deal directly with this concern, so we don't understand how it can be addressed or guaranteed. With the significant investments we have made in our housing, we are concerned about potential property devaluation and increased frequency of repairs to the masonry and/or substructure.

We recommend that a 5 to 10 year study be performed to insure that the vibration and noise controls are proving to be effective and maintain levels at or below the original conditions. We also recommend

O-029-001
As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

O-029-002
The potential noise and vibration impacts identified in DEIR/EA Chapter 5 account for the collective impacts of rail uses in the area. In other words, simultaneous Green Line and commuter rail movements are included in the analysis.

O-029-003
Please see response to Comment O-029-001.

O-029-004
Please see response to Comment O-029-001.

O-029-004 that the study start a few years before the Green Line begins operation so as to obtain a baseline, which we believe to be of particular importance in the case of the potential vibration damage to the building

Parking:

O-029-005 We already suffer from inadequate parking for residents, which is further strained by out-of-state tenants, commercial parking and neighborhood students. In reviewing the land plot plans, it appears that UPC is likely to lose three or four deeded parking spaces due to the expansion of the right of way for the MBTA/Commuter Rail. Loss of these spaces, combined with more traffic - particularly if the Route 16 station is not built concurrently or with inadequate parking - would prove unsatisfactory and an increased burden to the local residents.

How to adequately determine or reduce this impact is beyond our capabilities, but as local citizenry we would like some reassurance that our overall quality of life will not be negatively affected by the construction and/or operation of the Green Line extension.

Our neighbor Brendan Driscoll, of Driscoll Electric, has stated he would consider selling his property to be turned into the missing piece of a horseshoe road between Newbern Avenue and Morton Avenue, which could potentially address the "taken parking spots" and/or additional residential parking. Although we are not completely certain that we will lose parking spots, we realize it is possible and therefore request clarification of this issue.

Construction:

O-029-006 We do not believe the report fully addresses the disruption that will be caused by construction. We would like further explanation, particularly related to the Broadway commuter rail bridge which most of us use several times a day. We would like to know specifically how the bridge will be affected. Traffic congestion, noise, and disruption to the neighborhood during construction are particular areas of concern.

Traffic:

O-029-007 Failure to build the Route 16 station at all or in a timely manner, or building it without adequate parking is a concern for us. The residents of Medford do not wish to build a "new Alewife" super station. The Green Line extension is likely to attract some additional commuters but less likely from distant communities since it does not offer the same underground and "high speed" efficiencies of a subway line. But we are concerned about the lack of additional parking, particularly in the absence of a terminus parking garage, as well a lack of adequate bicycle parking for those likely to commute from the surrounding communities.

We appreciate the extensive work that has gone into this project and have reviewed this report to the best of our ability. As a group of environmentally responsible citizens we believe strongly in public transportation and ultimately want this project to succeed, even in our own backyard, which we mean *literally*, not just figuratively. But as responsible neighbors, homeowners and community members, we must ensure that the project is undertaken in a way that does not unduly disrupt our lives, our property or our neighborhood.

We hope you will give careful consideration to our concerns and would be happy to provide any further information you require.

Sincerely,

Adam Holland, Leslie Kramer, Daryl Marshall, Ralph Preston, Michael Schwartz
Trustees of University Place Condominiums

O-029-005

The Green Line Extension Project includes no taking on the east side of the tracks near Ball Square Station. Therefore, deeded parking spaces at the University Place Condominiums will not be impacted.

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for parking or passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns.

O-029-006

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures, including construction management plans, will be further advanced during preliminary engineering.

O-029-007

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

WACHUSETT GREENWAYS

RECEIVED

JAN 8 2010

MEPA

7 January 2010

Secretary Ian Bowles
Executive Office of Energy & Environmental Affairs
MEPA Office, Attn: Holly Johnson
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

Wachusett Greenways is an all-volunteer grassroots group which is building multi-use rail trail in Central Mass. With the help of the Dept. of Conservation & Recreation, the Office of Tourism, the towns, foundations and private donors, we have completed about 14 miles of trail west of the Wachusett Reservoir. The Mass Central Rail Trail has been projected as a key east-west trail by the Dept. of Conservation & Recreation in its publication Commonwealth Connections. We see ourselves as a contributing partner to this 104 mile connection between Northampton and Boston.

O-030-001

The extension of the Green Line provides both challenge and opportunity. If the "T" extension is built through a restricted cut in Somerville without consideration of the multi-use trail alongside, the trail connection will be effectively ruled out. In this era of encouraging alternate means of transportation (especially for the heavily concentrated population of Somerville), and the state's interest in continuous linear connections, this would be a significant loss.

O-030-002

Therefore, Wachusett Greenways urges your consideration of the proposal of the MCRT Coalition in our group letter of 5 January 2010: **To plan and construct simultaneously, both the Green Line extension and the Somerville Community Path between Lowell Street and Lechmere Square.**

We believe that it's a "now or never" opportunity.

Thank you for listening.

Edward P. Yaglou, Director
for Wachusett Greenways, Inc.

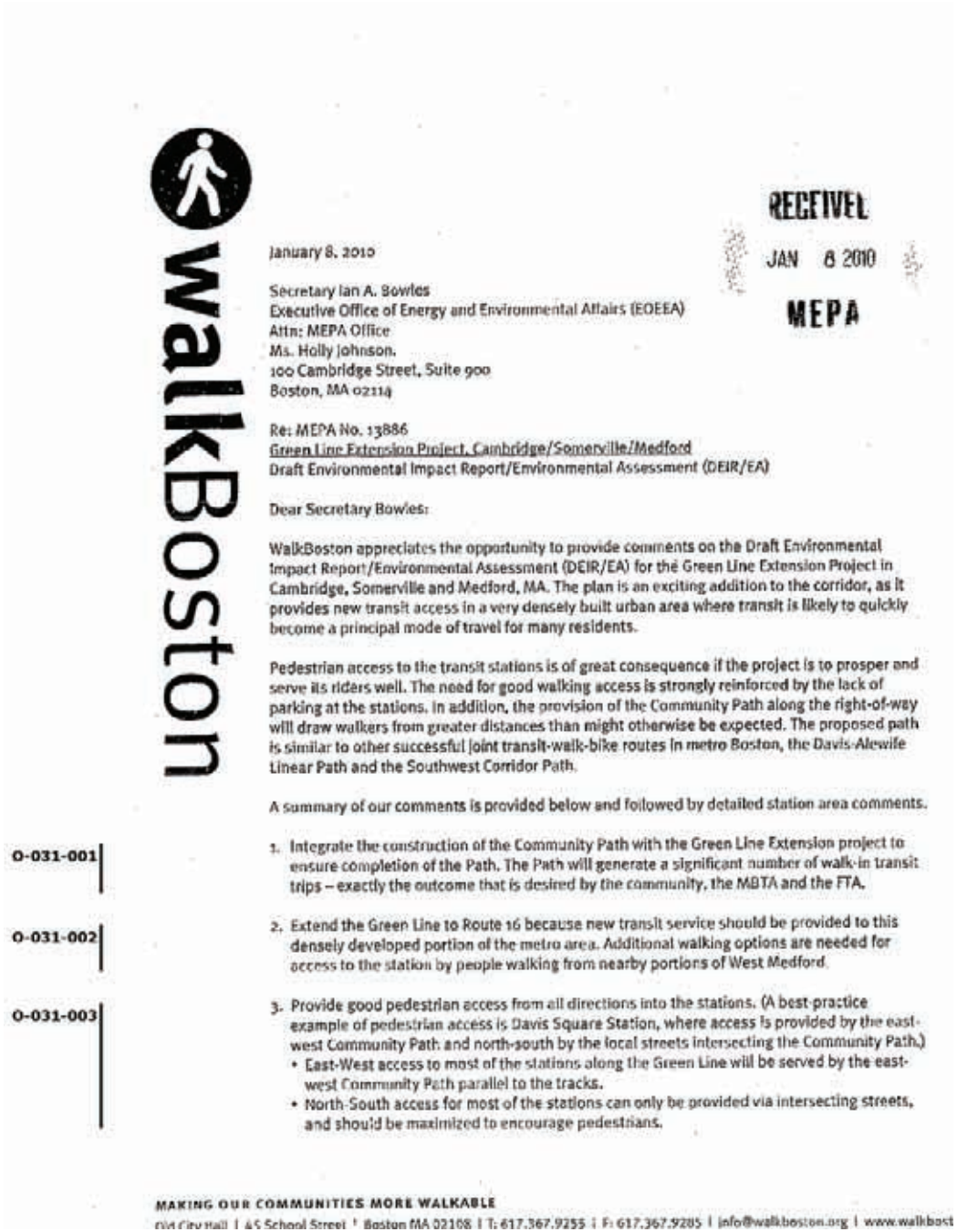
HOLDEN • PAXTON • PRINCETON • RUTLAND • STERLING • WEST BOYLSTON
P.O. Box 121 • Holden • MA • 01520 • (508) 829-3954

O-030-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-030-002

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.



walkBoston

RECEIVED
JAN 8 2010
MEPA

January 8, 2010

Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs (EOEEA)
Attn: MEPA Office
Ms. Holly Johnson,
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: MEPA No. 13886
Green Line Extension Project, Cambridge/Somerville/Medford
Draft Environmental Impact Report/Environmental Assessment (DEIR/EA)

Dear Secretary Bowles:

WalkBoston appreciates the opportunity to provide comments on the Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) for the Green Line Extension Project in Cambridge, Somerville and Medford, MA. The plan is an exciting addition to the corridor, as it provides new transit access in a very densely built urban area where transit is likely to quickly become a principal mode of travel for many residents.

Pedestrian access to the transit stations is of great consequence if the project is to prosper and serve its riders well. The need for good walking access is strongly reinforced by the lack of parking at the stations. In addition, the provision of the Community Path along the right-of-way will draw walkers from greater distances than might otherwise be expected. The proposed path is similar to other successful joint transit-walk-bike routes in metro Boston, the Davis-Alewife Linear Path and the Southwest Corridor Path.

A summary of our comments is provided below and followed by detailed station area comments.

O-031-001

1. Integrate the construction of the Community Path with the Green Line Extension project to ensure completion of the Path. The Path will generate a significant number of walk-in transit trips – exactly the outcome that is desired by the community, the MBTA and the FTA.

O-031-002

2. Extend the Green Line to Route 16 because new transit service should be provided to this densely developed portion of the metro area. Additional walking options are needed for access to the station by people walking from nearby portions of West Medford.

O-031-003

3. Provide good pedestrian access from all directions into the stations. (A best-practice example of pedestrian access is Davis Square Station, where access is provided by the east-west Community Path and north-south by the local streets intersecting the Community Path.)
   - East-West access to most of the stations along the Green Line will be served by the east-west Community Path parallel to the tracks.
   - North-South access for most of the stations can only be provided via intersecting streets, and should be maximized to encourage pedestrians.

MAKING OUR COMMUNITIES MORE WALKABLE

[illegible] | 45 School Street | Boston MA 02108 | T: 617.367.9255 | F: 617.367.9285 | info@walkboston.org | www.walkbost

O-031-001

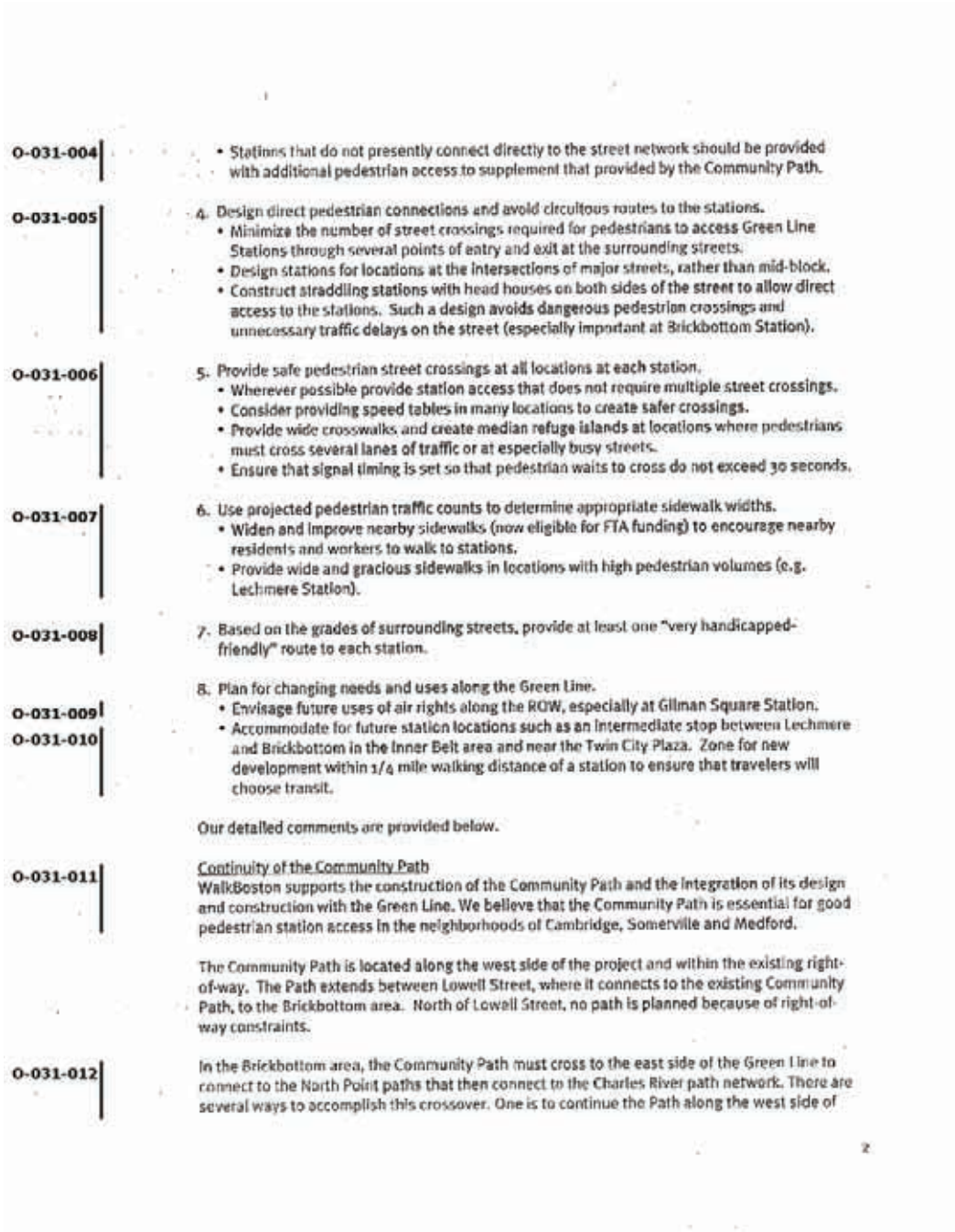
MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-031-002

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16 and related station access issues. Connections to West Medford and the existing commuter rail station can be specifically evaluated at that time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-031-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.



O-031-004
- Stations that do not presently connect directly to the street network should be provided with additional pedestrian access to supplement that provided by the Community Path.

O-031-005
4. Design direct pedestrian connections and avoid circuitous routes to the stations.
   - Minimize the number of street crossings required for pedestrians to access Green Line Stations through several points of entry and exit at the surrounding streets.
   - Design stations for locations at the intersections of major streets, rather than mid-block.
   - Construct straddling stations with head houses on both sides of the street to allow direct access to the stations. Such a design avoids dangerous pedestrian crossings and unnecessary traffic delays on the street (especially important at Brickbottom Station).

O-031-006
5. Provide safe pedestrian street crossings at all locations at each station.
   - Wherever possible provide station access that does not require multiple street crossings.
   - Consider providing speed tables in many locations to create safer crossings.
   - Provide wide crosswalks and create median refuge islands at locations where pedestrians must cross several lanes of traffic or at especially busy streets.
   - Ensure that signal timing is set so that pedestrian waits to cross do not exceed 30 seconds.

O-031-007
6. Use projected pedestrian traffic counts to determine appropriate sidewalk widths.
   - Widen and improve nearby sidewalks (now eligible for FTA funding) to encourage nearby residents and workers to walk to stations.
   - Provide wide and gracious sidewalks in locations with high pedestrian volumes (e.g. Lechmere Station).

O-031-008
7. Based on the grades of surrounding streets, provide at least one "very handicapped-friendly" route to each station.

8. Plan for changing needs and uses along the Green Line.

O-031-009
   - Envisage future uses of air rights along the ROW, especially at Gilman Square Station.

O-031-010
   - Accommodate for future station locations such as an intermediate stop between Lechmere and Brickbottom in the Inner Belt area and near the Twin City Plaza. Zone for new development within 1/4 mile walking distance of a station to ensure that travelers will choose transit.

Our detailed comments are provided below.

O-031-011
Continuity of the Community Path
WalkBoston supports the construction of the Community Path and the integration of its design and construction with the Green Line. We believe that the Community Path is essential for good pedestrian station access in the neighborhoods of Cambridge, Somerville and Medford.

The Community Path is located along the west side of the project and within the existing right-of-way. The Path extends between Lowell Street, where it connects to the existing Community Path, to the Brickbottom area. North of Lowell Street, no path is planned because of right-of-way constraints.

O-031-012
In the Brickbottom area, the Community Path must cross to the east side of the Green Line to connect to the North Point paths that then connect to the Charles River path network. There are several ways to accomplish this crossover. One is to continue the Path along the west side of

2

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-031-004

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-031-005

Please see response to Comment O-031-004.

O-031-012

the Green Line, pass over the replacement of the Red Bridge and descend to Water Street, pass under the Green Line viaduct and connect to North Point. A second possibility is to cross the Green Line at the Brickbottom Station, and connect through the Inner Belt area by following the alignment of a new roadway to be constructed over the commuter rail line to connect with Water Street in Cambridge. We think that the most practical solution is to construct the new Path along with the Green Line Extension and to use the Red Bridge replacement as route that connects to Water Street. This route does not depend on the possibility of a bridge that will be built over the Lowell and Fitchburg commuter rail lines at some time in the future. Building the Path along with the Green Line assures that it will be completed, while not precluding a branch of the Path connecting through the Inner Belt area in the future. Keeping the Community Path alignment on the west side of the Green Line in the vicinity of the Red Bridge replacement facility also retains the possibility of a future branch of the Path into Union Square and to the possible Grand Junction Path.

O-031-013

The option of crossing the Community Path to the east side of the tracks at Brickbottom Station should be retained. This routing allows for potential future connections of the Community Path through this area and complements the possibility that Somerville may want to allow more intensive development in this area. The connection beneath Brickbottom Station provides better access in all directions from the station and should be retained as a good investment with significant future development potential.

Lechmere Station – Street-level access for pedestrians

The proposed location for the new Lechmere Station was chosen in part to modernize access to the Green Line and to foster new development in the North Point area. New privately financed buildings around the station include dense residential and employment uses that will house, more riders for the Green Line. As more housing and job sites develop, the new station location may ultimately be more centrally located to walk-in traffic than it would be if it opened today.

The walking barrier created by Monsignor O'Brien Highway/Route 28 means that the new location is less convenient for many existing station users. Although it adds only a few additional feet beyond the location of the existing station, it requires crossing O'Brien Highway which is a very busy arterial street. This adds as much as one minute to the walking time for each Green Line rider coming from existing East Cambridge residential and business areas, and requires using the new First Street Extended intersection with O'Brien Highway. Adding to the traffic at this location is the proposed diversion of vehicles from Cambridge Street which is to be partially abandoned between First Street and O'Brien Highway. This means additional traffic will pass through the intersection with increased and potentially heavy turning movements.

The design of the new roadways in the vicinity of Lechmere Station creates a complex set of intersections where pedestrians must cross the highway. Assuming that current patronage levels are maintained or increased, this will mean that a significant number of pedestrians will pass through these intersections on a daily basis. In the current design, it appears that virtually all walk-in Green Line patrons at the new Lechmere Station will need to cross First Street where it crosses O'Brien Highway. Some additional pedestrian crossings are envisioned for the intersections of O'Brien Highway at Second Street/Water Street and at Third Street.

O-031-014

The heavy traffic along O'Brien Highway suggests that special precautions will be needed for pedestrians going to or from the Lechmere Station. Because of the heavy traffic, protection for pedestrians at all crosswalk locations should include extra-wide crosswalks and pedestrian-

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O-031-006

Please see response to Comment O-031-004.

O-031-007

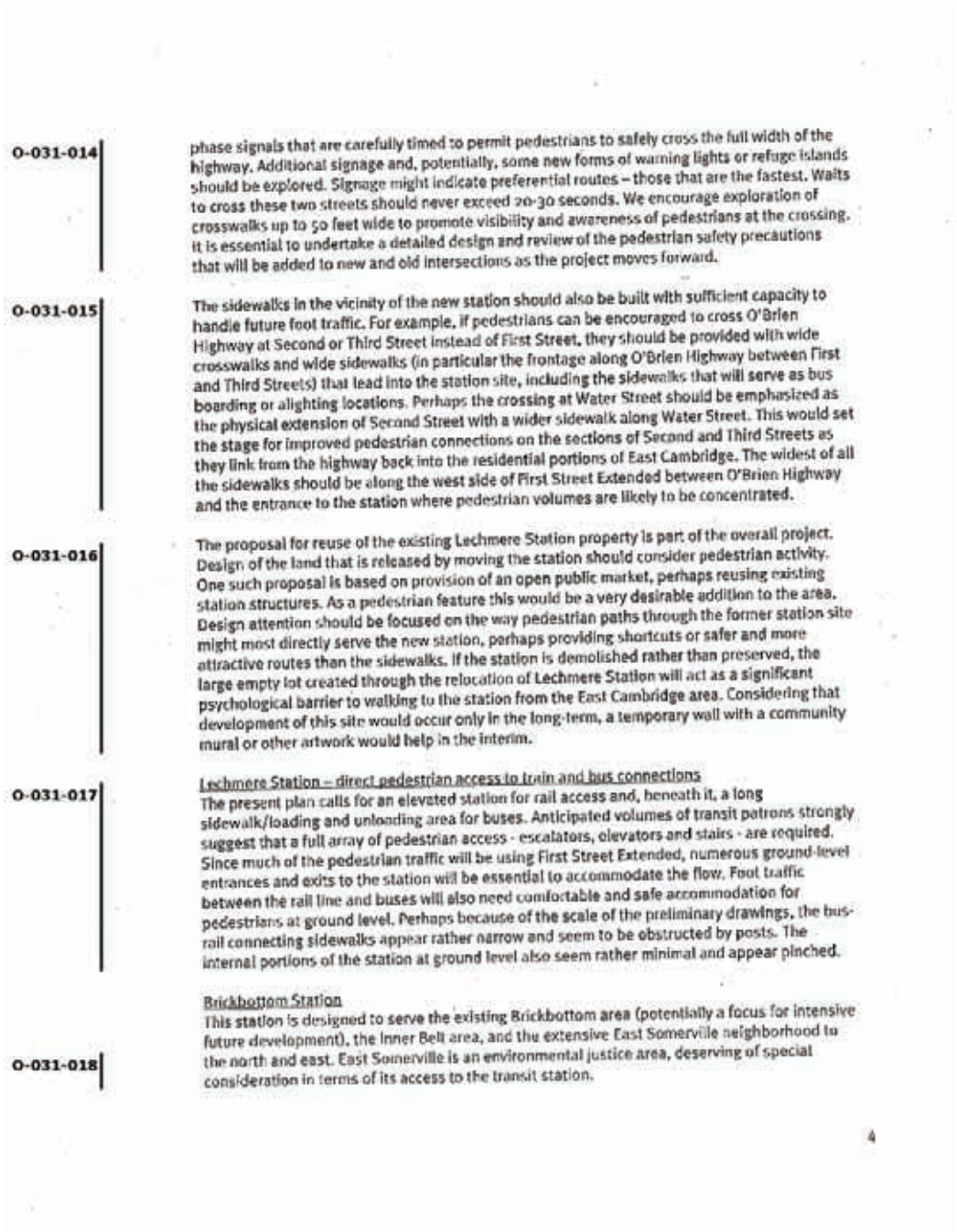
Wider sidewalks will be incorporated into station design in areas immediately surrounding the station to the extent practical. There is no opportunity to widen sidewalks outside of the immediate station area. The neighborhoods which the Green Line would serve are dense, urban neighborhoods that have narrow rights-of-way and buildings located immediately adjacent to the existing back of sidewalk.

O-031-008

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-031-009

MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for smart growth land use, which



O-031-014

phase signals that are carefully timed to permit pedestrians to safely cross the full width of the highway. Additional signage and, potentially, some new forms of warning lights or refuge islands should be explored. Signage might indicate preferential routes – those that are the fastest. Waits to cross these two streets should never exceed 20-30 seconds. We encourage exploration of crosswalks up to 50 feet wide to promote visibility and awareness of pedestrians at the crossing. It is essential to undertake a detailed design and review of the pedestrian safety precautions that will be added to new and old intersections as the project moves forward.

O-031-015

The sidewalks in the vicinity of the new station should also be built with sufficient capacity to handle future foot traffic. For example, if pedestrians can be encouraged to cross O'Brien Highway at Second or Third Street instead of First Street, they should be provided with wide crosswalks and wide sidewalks (in particular the frontage along O'Brien Highway between First and Third Streets) that lead into the station site, including the sidewalks that will serve as bus boarding or alighting locations. Perhaps the crossing at Water Street should be emphasized as the physical extension of Second Street with a wider sidewalk along Water Street. This would set the stage for improved pedestrian connections on the sections of Second and Third Streets as they link from the highway back into the residential portions of East Cambridge. The widest of all the sidewalks should be along the west side of First Street Extended between O'Brien Highway and the entrance to the station where pedestrian volumes are likely to be concentrated.

O-031-016

The proposal for reuse of the existing Lechmere Station property is part of the overall project. Design of the land that is released by moving the station should consider pedestrian activity. One such proposal is based on provision of an open public market, perhaps reusing existing station structures. As a pedestrian feature this would be a very desirable addition to the area. Design attention should be focused on the way pedestrian paths through the former station site might most directly serve the new station, perhaps providing shortcuts or safer and more attractive routes than the sidewalks. If the station is demolished rather than preserved, the large empty lot created through the relocation of Lechmere Station will act as a significant psychological barrier to walking to the station from the East Cambridge area. Considering that development of this site would occur only in the long-term, a temporary wall with a community mural or other artwork would help in the interim.

O-031-017

Lechmere Station – direct pedestrian access to train and bus connections
The present plan calls for an elevated station for rail access and, beneath it, a long sidewalk/loading and unloading area for buses. Anticipated volumes of transit patrons strongly suggest that a full array of pedestrian access - escalators, elevators and stairs - are required. Since much of the pedestrian traffic will be using First Street Extended, numerous ground-level entrances and exits to the station will be essential to accommodate the flow. Foot traffic between the rail line and buses will also need comfortable and safe accommodation for pedestrians at ground level. Perhaps because of the scale of the preliminary drawings, the bus-rail connecting sidewalks appear rather narrow and seem to be obstructed by posts. The internal portions of the station at ground level also seem rather minimal and appear pinched.

Brickbottom Station
This station is designed to serve the existing Brickbottom area (potentially a focus for intensive future development), the Inner Belt area, and the extensive East Somerville neighborhood to the north and east. East Somerville is an environmental justice area, deserving of special consideration in terms of its access to the transit station.

O-031-018

4

could further reduce automobile traffic congestion and improve air quality.

O-031-010

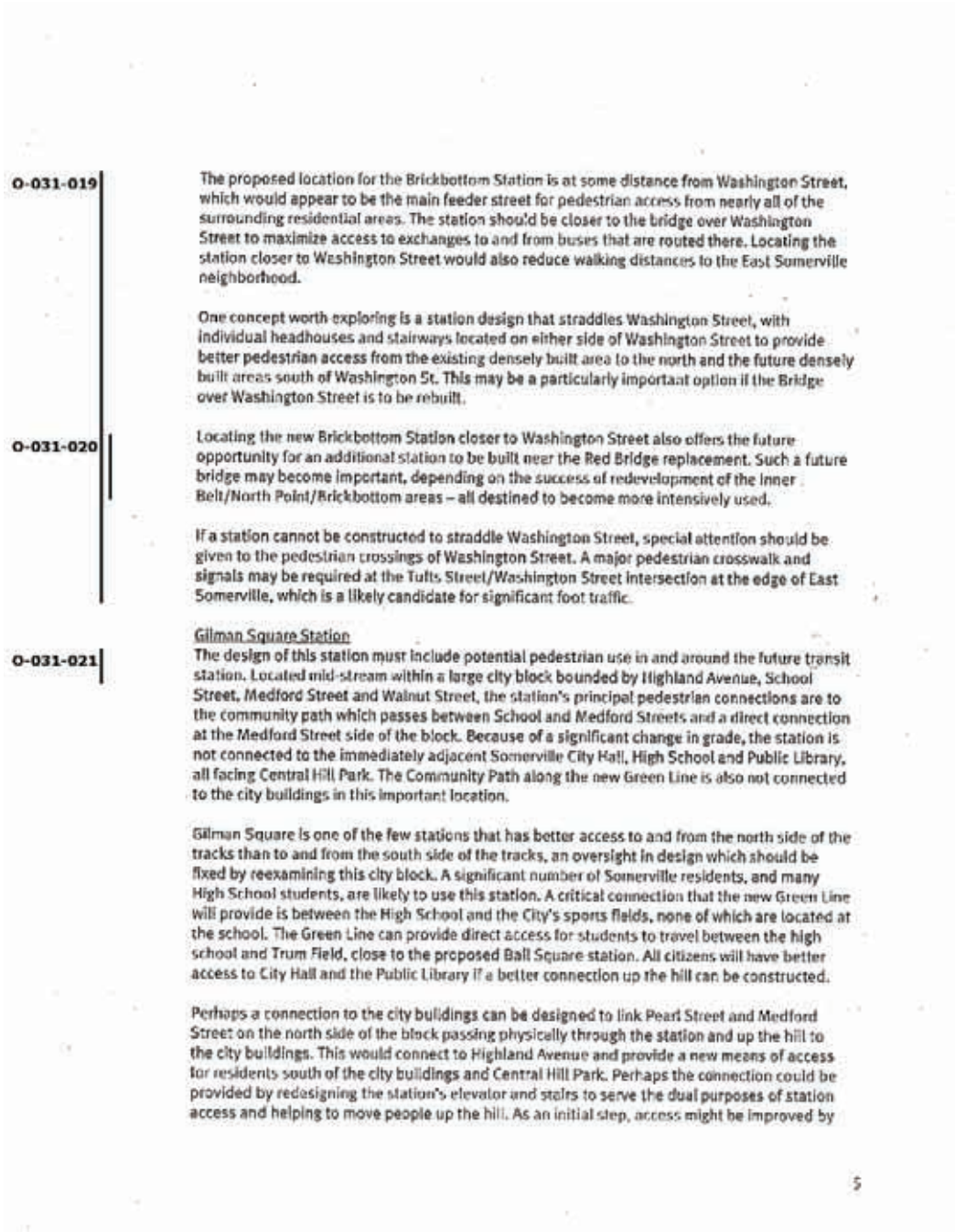
As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-031-011

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

O-031-012

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path



O-031-019

The proposed location for the Brickbottom Station is at some distance from Washington Street, which would appear to be the main feeder street for pedestrian access from nearly all of the surrounding residential areas. The station should be closer to the bridge over Washington Street to maximize access to exchanges to and from buses that are routed there. Locating the station closer to Washington Street would also reduce walking distances to the East Somerville neighborhood.

One concept worth exploring is a station design that straddles Washington Street, with individual headhouses and stairways located on either side of Washington Street to provide better pedestrian access from the existing densely built area to the north and the future densely built areas south of Washington St. This may be a particularly important option if the Bridge over Washington Street is to be rebuilt.

O-031-020

Locating the new Brickbottom Station closer to Washington Street also offers the future opportunity for an additional station to be built near the Red Bridge replacement. Such a future bridge may become important, depending on the success of redevelopment of the Inner Belt/North Point/Brickbottom areas – all destined to become more intensively used.

If a station cannot be constructed to straddle Washington Street, special attention should be given to the pedestrian crossings of Washington Street. A major pedestrian crosswalk and signals may be required at the Tufts Street/Washington Street intersection at the edge of East Somerville, which is a likely candidate for significant foot traffic.

Gilman Square Station

O-031-021

The design of this station must include potential pedestrian use in and around the future transit station. Located mid-stream within a large city block bounded by Highland Avenue, School Street, Medford Street and Walnut Street, the station's principal pedestrian connections are to the community path which passes between School and Medford Streets and a direct connection at the Medford Street side of the block. Because of a significant change in grade, the station is not connected to the immediately adjacent Somerville City Hall, High School and Public Library, all facing Central Hill Park. The Community Path along the new Green Line is also not connected to the city buildings in this important location.

Gilman Square is one of the few stations that has better access to and from the north side of the tracks than to and from the south side of the tracks, an oversight in design which should be fixed by reexamining this city block. A significant number of Somerville residents, and many High School students, are likely to use this station. A critical connection that the new Green Line will provide is between the High School and the City's sports fields, none of which are located at the school. The Green Line can provide direct access for students to travel between the high school and Trum Field, close to the proposed Ball Square station. All citizens will have better access to City Hall and the Public Library if a better connection up the hill can be constructed.

Perhaps a connection to the city buildings can be designed to link Pearl Street and Medford Street on the north side of the block passing physically through the station and up the hill to the city buildings. This would connect to Highland Avenue and provide a new means of access for residents south of the city buildings and Central Hill Park. Perhaps the connection could be provided by redesigning the station's elevator and stairs to serve the dual purposes of station access and helping to move people up the hill. As an initial step, access might be improved by

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advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

O-031-013

Please see response to Comment O-031-012.

O-031-014

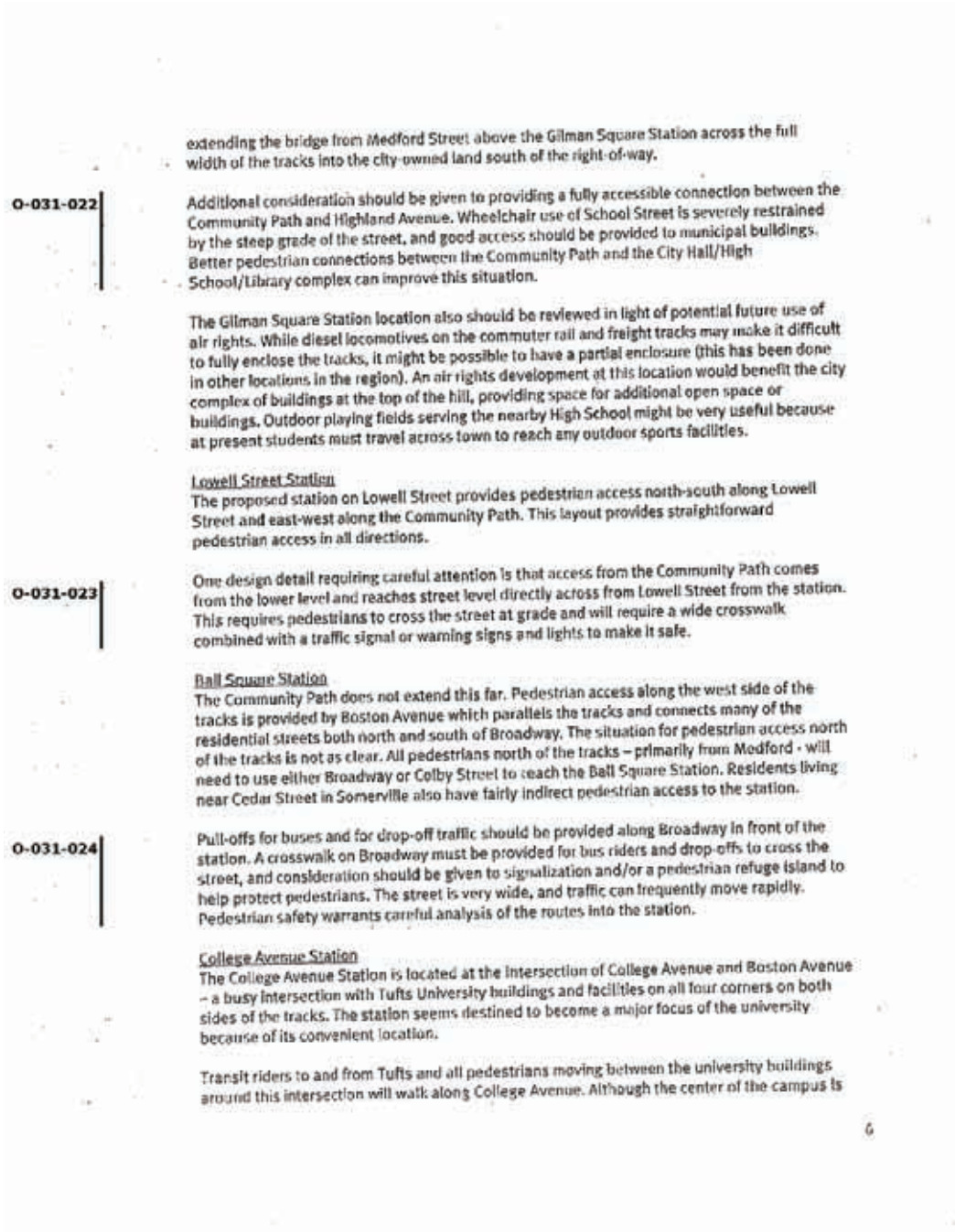
Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

O-031-015

Sidewalks in the vicinity of the station will be maximized to the extent practical. The right-of-way along O'Brien Highway can not be increased due to building setbacks in many locations. No opportunities exist to further narrow the roadway (beyond what is currently proposed) and the wide median is necessary to properly channelize traffic and serves as a pedestrian refuge area.

O-031-016

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line



extending the bridge from Medford Street above the Gilman Square Station across the full width of the tracks into the city-owned land south of the right-of-way.

O-031-022

Additional consideration should be given to providing a fully accessible connection between the Community Path and Highland Avenue. Wheelchair use of School Street is severely restrained by the steep grade of the street, and good access should be provided to municipal buildings. Better pedestrian connections between the Community Path and the City Hall/High School/Library complex can improve this situation.

The Gilman Square Station location also should be reviewed in light of potential future use of air rights. While diesel locomotives on the commuter rail and freight tracks may make it difficult to fully enclose the tracks, it might be possible to have a partial enclosure (this has been done in other locations in the region). An air rights development at this location would benefit the city complex of buildings at the top of the hill, providing space for additional open space or buildings. Outdoor playing fields serving the nearby High School might be very useful because at present students must travel across town to reach any outdoor sports facilities.

Lowell Street Station

The proposed station on Lowell Street provides pedestrian access north-south along Lowell Street and east-west along the Community Path. This layout provides straightforward pedestrian access in all directions.

O-031-023

One design detail requiring careful attention is that access from the Community Path comes from the lower level and reaches street level directly across from Lowell Street from the station. This requires pedestrians to cross the street at grade and will require a wide crosswalk combined with a traffic signal or warning signs and lights to make it safe.

Ball Square Station

The Community Path does not extend this far. Pedestrian access along the west side of the tracks is provided by Boston Avenue which parallels the tracks and connects many of the residential streets both north and south of Broadway. The situation for pedestrian access north of the tracks is not as clear. All pedestrians north of the tracks – primarily from Medford - will need to use either Broadway or Colby Street to reach the Ball Square Station. Residents living near Cedar Street in Somerville also have fairly indirect pedestrian access to the station.

O-031-024

Pull-offs for buses and for drop-off traffic should be provided along Broadway in front of the station. A crosswalk on Broadway must be provided for bus riders and drop-offs to cross the street, and consideration should be given to signalization and/or a pedestrian refuge island to help protect pedestrians. The street is very wide, and traffic can frequently move rapidly. Pedestrian safety warrants careful analysis of the routes into the station.

College Avenue Station

The College Avenue Station is located at the intersection of College Avenue and Boston Avenue – a busy intersection with Tufts University buildings and facilities on all four corners on both sides of the tracks. The station seems destined to become a major focus of the university because of its convenient location.

Transit riders to and from Tufts and all pedestrians moving between the university buildings around this intersection will walk along College Avenue. Although the center of the campus is

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Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

O-031-017

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

O-031-018

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process. Based on the analysis conducted during development of the DEIR/EA, it was determined that only one station would be warranted in the vicinity of the Brickbottom neighborhood and Washington Street. This analysis can be found in Appendix A of the DEIR/EA

O-031-019

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

not far from College Avenue, it is located atop a hill that requires long paths and/or stairs to reach. Pedestrians walking along College Avenue may encounter some issues because of the relatively narrow sidewalk along this street, hemmed in by a college wrought iron and brick-pillared fence. Although outside the scope of this project, Tufts may want to consider widening this sidewalk or perhaps seeking new means of access between the campus center and Boston Avenue /College Avenue from other directions or with other paths/stairs. The proposed street improvements to be made at the intersection as part of the project should provide for future wider sidewalks along College Avenue.

Bus access to the station is also constrained by the location of the stops on College Avenue south of Boston Avenue. Moving at least one of the stops closer to the intersection, on Boston Avenue just across from the station should be considered because it would shorten the walk from the bus to the station for transit riders and perhaps enhance ridership.

Drop off areas for the station could be improved. The current plan shows a limited space on the north side of Boston Avenue adjacent to the station entrance. A similar drop-off spot on the south side of Boston Avenue traffic would be useful. Two access points for one station would help during inclement weather and provide more convenient transfer between private vehicles and buses.

North of the tracks, the residential area is cut off from direct access to College Avenue by Tufts University buildings. One way to help circulation between the residential district north of the tracks and the Station would be to find a route through Tufts properties from the end of Burget Avenue to College Avenue. Physically the space appears to be available, but it will be up to the University to examine and perhaps institute this improvement.

Route 16/Mystic Valley Parkway Station

The proposed terminus of the Green Line Extension is a station located at one side of a city block bounded by Boston Avenue, Mystic Valley Parkway, Auburn Street and North Street. The proposed station entrance is immediately adjacent to the Parkway on a service road that loops in from Boston Avenue. The station location has limited pedestrian access. The highway is crowded and busy. North of the river residents have access to the commuter rail line at West Medford and may not be a primary market for this station. South of the river, the residences surrounding the station site are provided access only via the Parkway entrance and the access road off Boston Avenue. From a pedestrian point-of-view, North Street is perhaps a preferable walking route. It runs through the residential neighborhood, connecting to many of the likely riders of the new line. However, access from North Street is presently limited to its connection to Boston Avenue and to the access driveway to the station – resulting in a very indirect set of physical connections.

O-031-025

The proposed head house is located directly on Mystic Valley Parkway, a symbolic location which will certainly assist pedestrians in reaching the station from that street. However, access for pedestrians from all other directions is secondary to vehicle access. Boston Avenue, with narrow sidewalks, is not an attractive route to encourage pedestrians. The present crosswalks at Stoughton Street and Boston Avenue are scheduled for replacement to make the route to the station more direct, and will require careful design to assure safe passage for pedestrians across Boston Avenue and the access road into the station. Because so much of the pedestrian access from residential neighborhoods is concentrated on the Boston Avenue entrance, wide crosswalks, signals and signing will be essential to help pedestrians reach the station safely.

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O-031-020

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

O-031-021

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-031-022

The DEIR/EA and FEIR include conceptual station designs. Designs for each station will be refined during the Project's preliminary engineering stage. Design and construction of station approach routes beyond the immediate station entrance areas are outside the scope of the Green Line Extension Project.

The preliminary station designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement as the station designs are refined.

O-031-023

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access

O-031-026

Pedestrian routes through the Mystic Valley Park, parallel to the parkway, are not shown as connecting to the headhouse, instead they are truncated, requiring use of the sidewalks along the parkway for the final connection to the proposed station. The Mystic Valley Park pedestrian routes should be upgraded to provide good pedestrian access to the station.

Union Square

From a pedestrian point-of-view, the proposed location for the Union Square station is unfortunate because the site is not located centrally to either the residential or commercial areas. (The city may be able to transform the station area in the future.) Pedestrian connections between the existing uses and the station are very indirect, with the site at the edge of the transit loop that may be significantly changed when or if Prospect Street becomes two-way. The

O-031-027

proposed sidewalk leading into the square is badly conceived – a wide sidewalk heading toward Union Square, but ending just a few feet from the station. Pedestrians, and local businesses would be better served by a station located much closer to the center of the square.

O-031-028

Few existing streets can be used to connect the new Green Line into the Square. One possibility for improving the connection to Union Square would be to route the new light rail line through the salvage yard area directly to Somerville Avenue north to a terminal station at the southeast corner of Prospect Street and Somerville Avenue. A station in this location would be sited at one end of the commercial center and fully accessible to all merchants and significantly closer to existing residential areas. The station would be highly visible as well – an anchor to the business area and a visible sign of its renewal as a dynamic center of urban life in Somerville.

O-031-029

At a later date, it might be possible to extend the Green Line as a streetcar along Somerville Avenue to reach further into the residential areas of the city and serve more riders. A potential benefit of that extension could be the provision of a loop through the square onto Webster Avenue and back to the alignment of the Union Square line at the location where the loop begins going north toward the square. This should not preclude a future extension of the Green Line toward Porter Square.

Thank you for the opportunity to comment on the DEIR/EA for the Green Line Extension. Please contact us for any clarification or additional comments that you may need.

Sincerely,

Wendy Landman
Executive Director

Robert Sloane
Senior Planner

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and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-031-024

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. However, a drop-off/pick-up along Broadway in the vicinity of Ball Square was evaluated. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

O-031-025

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not

included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout and access at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-031-026

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

O-031-027

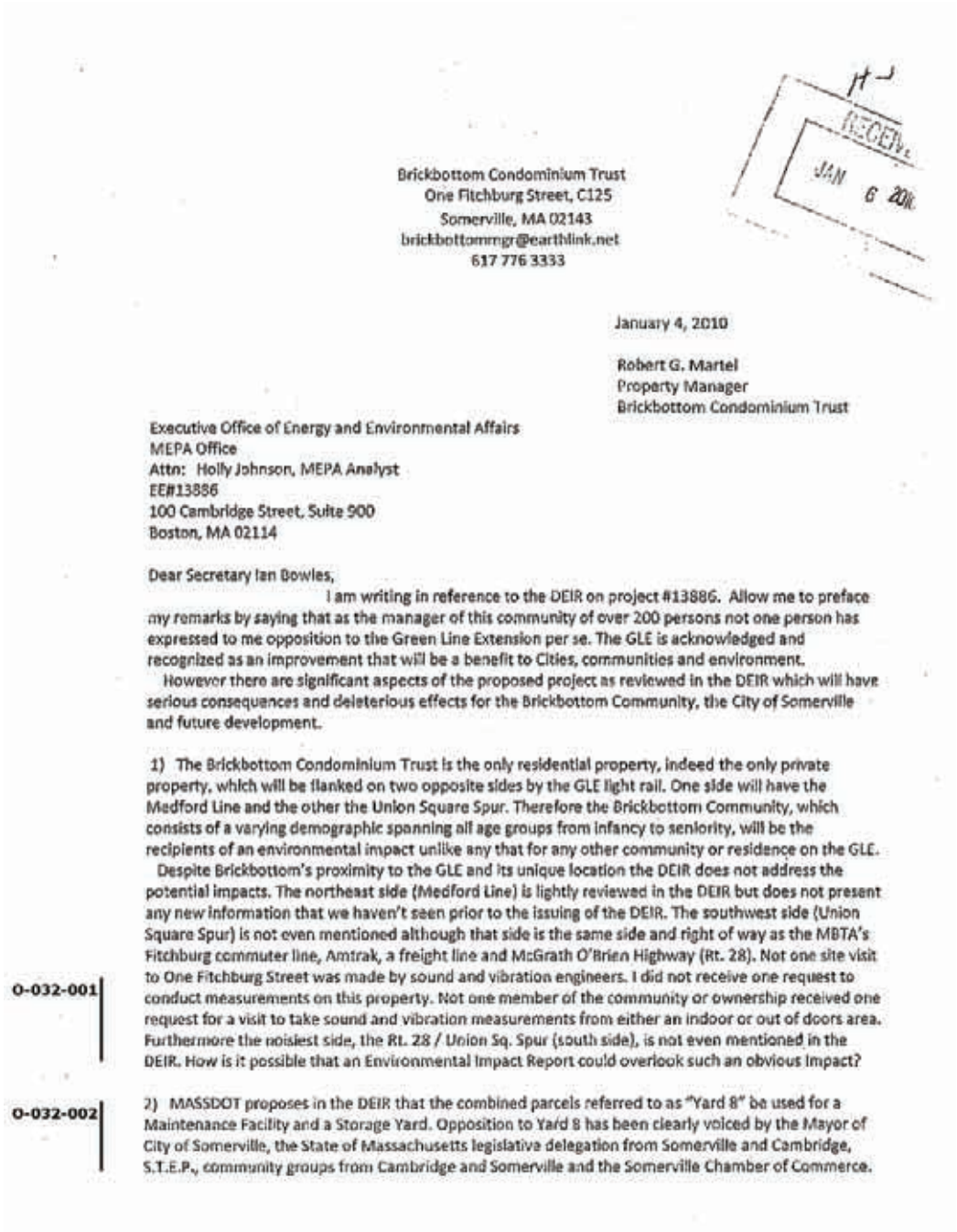
As stated in the Executive Summary of the DEIR/EA, page ES-13, and DEIR/EA Appendix B, other station locations were evaluated for Union Square Station. Locations closer to to the center of Union Square were not selected due to their substantially higher environmental impacts and costs. The DEIR/EA and FEIR include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

O-031-028

Please see response to Comment O-031-027.

O-031-029

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions. These potential future improvements include an extension of the Union Square Branch to Porter Square.



Brickbottom Condominium Trust
One Fitchburg Street, C125
Somerville, MA 02143
brickbottommgr@earthlink.net
617 776 3333

RECEIVED
JAN 6 2010

January 4, 2010

Robert G. Martel
Property Manager
Brickbottom Condominium Trust

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing in reference to the DEIR on project #13886. Allow me to preface my remarks by saying that as the manager of this community of over 200 persons not one person has expressed to me opposition to the Green Line Extension per se. The GLE is acknowledged and recognized as an improvement that will be a benefit to Cities, communities and environment.

However there are significant aspects of the proposed project as reviewed in the DEIR which will have serious consequences and deleterious effects for the Brickbottom Community, the City of Somerville and future development.

1) The Brickbottom Condominium Trust is the only residential property, indeed the only private property, which will be flanked on two opposite sides by the GLE light rail. One side will have the Medford Line and the other the Union Square Spur. Therefore the Brickbottom Community, which consists of a varying demographic spanning all age groups from infancy to seniority, will be the recipients of an environmental impact unlike any that for any other community or residence on the GLE.

Despite Brickbottom's proximity to the GLE and its unique location the DEIR does not address the potential impacts. The northeast side (Medford Line) is lightly reviewed in the DEIR but does not present any new information that we haven't seen prior to the issuing of the DEIR. The southwest side (Union Square Spur) is not even mentioned although that side is the same side and right of way as the MBTA's Fitchburg commuter line, Amtrak, a freight line and McGrath O'Brien Highway (Rt. 28). Not one site visit to One Fitchburg Street was made by sound and vibration engineers. I did not receive one request to conduct measurements on this property. Not one member of the community or ownership received one request for a visit to take sound and vibration measurements from either an indoor or out of doors area. Furthermore the noisiest side, the Rt. 28 / Union Sq. Spur (south side), is not even mentioned in the DEIR. How is it possible that an Environmental Impact Report could overlook such an obvious impact?

O-032-001

2) MASSDOT proposes in the DEIR that the combined parcels referred to as "Yard 8" be used for a Maintenance Facility and a Storage Yard. Opposition to Yard 8 has been clearly voiced by the Mayor of City of Somerville, the State of Massachusetts legislative delegation from Somerville and Cambridge, S.T.E.P., community groups from Cambridge and Somerville and the Somerville Chamber of Commerce.

O-032-002

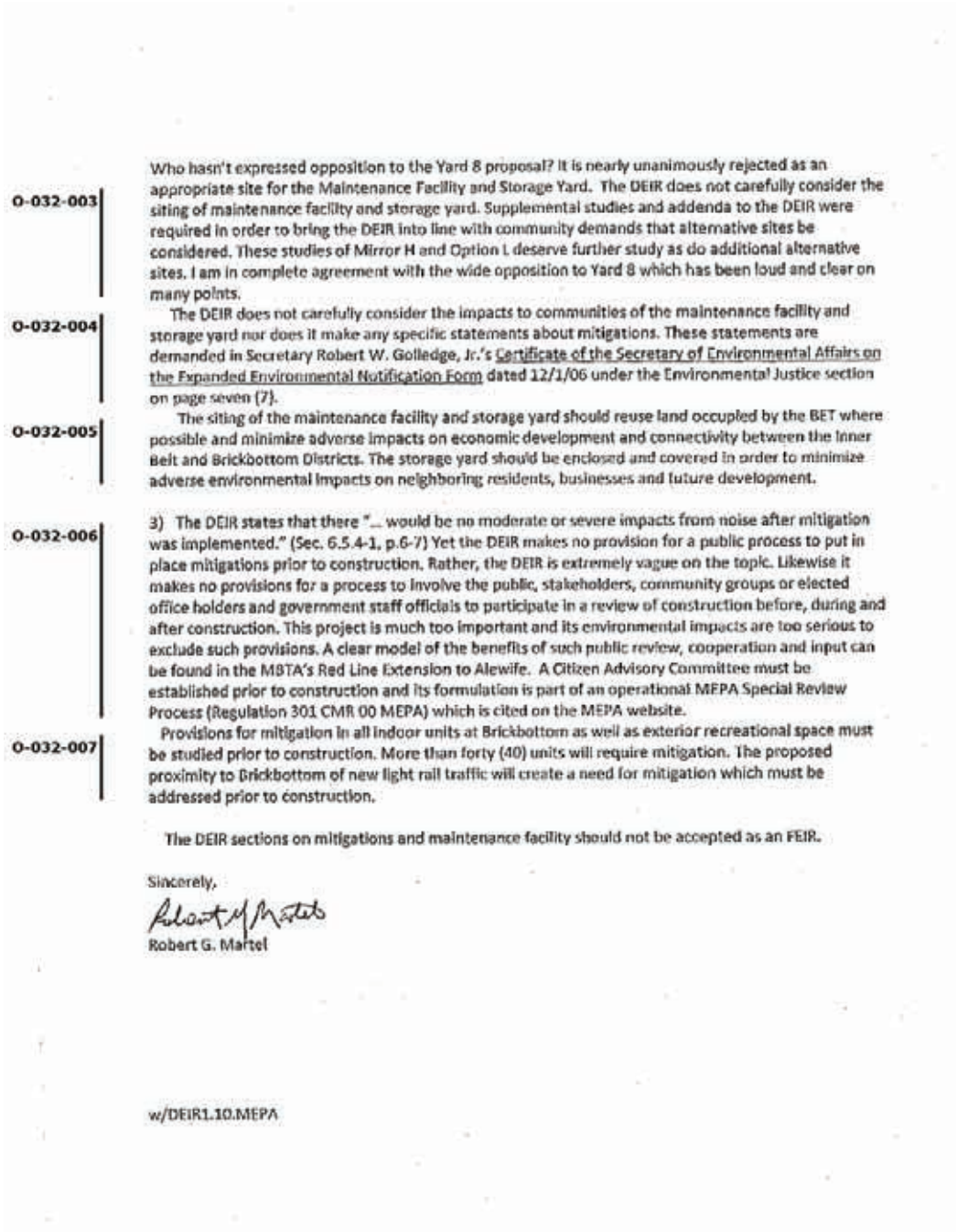
O-032-001

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been reported in an expanded analysis of potential noise and vibration impacts at the Brickbottom Artists Buildings, reported in FEIR Chapter 8.

Based on recent site visits to the property, exterior land use with frequent human use has been identified at Brickbottom Artists Building and potential noise impact and mitigation will be assessed accordingly. Findings and associated mitigation commitments will be evaluated during preliminary engineering.

O-032-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



O-032-003

Who hasn't expressed opposition to the Yard 8 proposal? It is nearly unanimously rejected as an appropriate site for the Maintenance Facility and Storage Yard. The DEIR does not carefully consider the siting of maintenance facility and storage yard. Supplemental studies and addenda to the DEIR were required in order to bring the DEIR into line with community demands that alternative sites be considered. These studies of Mirror H and Option L deserve further study as do additional alternative sites. I am in complete agreement with the wide opposition to Yard 8 which has been loud and clear on many points.

O-032-004

The DEIR does not carefully consider the impacts to communities of the maintenance facility and storage yard nor does it make any specific statements about mitigations. These statements are demanded in Secretary Robert W. Golledge, Jr.'s Certificate of the Secretary of Environmental Affairs on the Expanded Environmental Notification Form dated 12/1/06 under the Environmental Justice section on page seven (7).

O-032-005

The siting of the maintenance facility and storage yard should reuse land occupied by the BET where possible and minimize adverse impacts on economic development and connectivity between the Inner Belt and Brickbottom Districts. The storage yard should be enclosed and covered in order to minimize adverse environmental impacts on neighboring residents, businesses and future development.

O-032-006

3) The DEIR states that there "... would be no moderate or severe impacts from noise after mitigation was implemented." (Sec. 6.5.4-1, p.6-7) Yet the DEIR makes no provision for a public process to put in place mitigations prior to construction. Rather, the DEIR is extremely vague on the topic. Likewise it makes no provisions for a process to involve the public, stakeholders, community groups or elected office holders and government staff officials to participate in a review of construction before, during and after construction. This project is much too important and its environmental impacts are too serious to exclude such provisions. A clear model of the benefits of such public review, cooperation and input can be found in the MBTA's Red Line Extension to Alewife. A Citizen Advisory Committee must be established prior to construction and its formulation is part of an operational MEPA Special Review Process (Regulation 301 CMR 00 MEPA) which is cited on the MEPA website.

O-032-007

Provisions for mitigation in all indoor units at Brickbottom as well as exterior recreational space must be studied prior to construction. More than forty (40) units will require mitigation. The proposed proximity to Brickbottom of new light rail traffic will create a need for mitigation which must be addressed prior to construction.

The DEIR sections on mitigations and maintenance facility should not be accepted as an FEIR.

Sincerely,

Robert G. Martel

w/DEIR1.10.MEPA

O-032-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

O-032-004

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

O-032-005

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources.

MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

O-032-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

O-032-007

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

ADZ GROUP

December 21, 2009

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02108

RE: Project Number EEA #13886

Dear Secretary Bowles,

As a business owner, landlord and also owner-occupant in the Brickbottom Artists Building in Somerville, I have a very vested interest in the long-term financial viability of the building and surrounding community. More than a decade ago I invested in my initial purchase in this building and have added to that investment over time. I chose this location in part due to its proximity to central Boston, the obvious future development potential that affords and the overall quality of life in this residential community. However this is now threatened by the location of the proposed Green Line Extension maintenance and storage facility.

Overall I am extremely pleased that the Green Line Extension project is moving ahead and I feel that the station to be developed within two blocks of this building will significantly increase the community's quality of life and help grow the area. This also recognizes the area's long-term potential as a vibrant center.

B-001-001 The residential environment could be destroyed however by the proposal to locate an 11+ acre heavy maintenance facility on the parcel known as "Yard 8." This is especially true because there is significant evidence that other locations such as the Option L location could also meet the facility's need while having much less environmental impact on the surrounding community.

The "Yard 8" location directly abuts the only residences (200+ occupants) in the surrounding area. Selection of that site would have significant noise and vibration impacts on these residences. Even with significant mitigation such as replacement windows to reduce noise, quality of life will be negatively impacted since those mitigation actions would do nothing for occupants when they would open their windows in the warmer summer months. Selection of the Option L location would not have the same impacts and would require far fewer mitigation steps.

In addition as the Commonwealth moves to being more of a service and "clean" economy, it makes no sense to create a new industrial zone located directly adjacent to an existing residential complex when an alternative site offers largely the same potential without the environmental and community impacts. A quick comparison of the options highlights the negative impacts of selecting Yard 8 for the maintenance and storage facility.

Alden Zacha, Principal

B-001-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

B-001-002

	Yard 8	Option L
Impact to residents	**High** – Site directly abuts the only residences in the surrounding area. Noise and vibration impacts will be significant and even with significant mitigation, quality of life will be negatively impacted	**Low** – Site is reasonably far from any residences. Noise and vibration impacts should be minimal and may require little mitigation
Loss of development potential	**High** – Surrounding properties will likely remain industrial rather than converting to higher value office / commercial	**Low** – Area is bounded by I-93 and proposed large-scale mixed use development
Property tax loss – direct	**High** – Currently zoned commercial	**Low** – Currently owned by government agencies
Property tax loss – indirect	**High** – Surrounding commercial and residential areas will likely face reduced valuations	**None** – Location is already industrial train location bounded by I-93 and large-scale mixed use development

Given these facts, I strongly urge you to support the Option L location for the maintenance facility which minimizes the negative impacts on the community.

Thank you for your consideration and time on this extremely important matter.



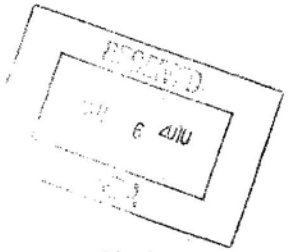
Alden Zecha

B-001-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

BIOVENTURES
INVESTORS

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114



Reference to Project Number EEA #13886

Dear Secretary Ian Bowles,

B-002-001 I am writing to express my opposition to the location of the maintenance yard for the Green Line at Yard 8. While I support the extension of the Green line to Somerville and Medford, which will improve the quality of life in and enhance the economic development of these communities, the Yard 8 location for a maintenance and storage yard impinges strongly on a residential area and blocks the future economic development of the entire Brickbottom and inner belt area. Not only does it irrevocably split apart the development of the area, but it takes 11 acres that is already permitted and zoned for future development that would add to the city's tax base.

I am a Cambridge resident, but I own property at Brickbottom and pay taxes on that property to Somerville. I have a strong interest in the values at Brickbottom and the quality of life available there. The Brickbottom Artists community is a strong vibrant group of producing artists that also serves a community function through its display gallery. Since at the very least, Brickbottom will be exposed to the running of trains during the normal Green Line service, great attention should be paid to issues of mitigation of the noise of the air-conditioners and the wheels of the trains--this issue applies to all the above ground trains throughout Somerville. However, the trains are to pass very close to Brickbottom--any movement of the tracks away from the building would be valuable, as well as other efforts to mitigate the sound level at Brickbottom. I recommend a 20 foot wall separating the tracks and the building--and also that all the units in the building be soundproofed--the 220 people living there on top of the trains deserve at least that.

B-002-002

The Yard 8 site would make living and working in Brickbottom intolerable. The entire storage and maintenance of all the cars for the entire Green line and the extension is made to fall upon the people of Brickbottom in a way that destroys their property values and blocks the future economic development of this area of Somerville.

B-002-003 I strongly support the investigation of alternative sites, and recommend the choice of Mirror H, which puts the maintenance facility near similar functions and out of the path of economic development in Somerville. The alternative Option L--if the yards are moved as far East as possible--still will permit the development of the inner belt.

Yours sincerely,

Walter Gilbert
Managing Director, BioVentures Investors
Nobel Prize in Chemistry, 1980

BioVentures Investors 101 Main Street, Suite 1750 Cambridge, MA 02142 Tel (617) 252-3443 Fax (617) 621-7993

B-002-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

B-002-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

B-002-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

CATAMOUNT HOLDINGS LLC
SIX KIMBALL LANE
LYNNFIELD, MASSACHUSETTS 01940

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson
EEA number #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: GREEN LINE EXTENSION AND MAINTENANCE AND STORAGE FACILITY

Dear Secretary Bowles:

I am writing to you regarding the Draft Environmental Impact Report/Environmental Assessment filed on 10/15/2009 with the Massachusetts Environmental Policy Act Office, and the additional analysis (Technical Memorandum entitled Additional Maintenance Facility Alternatives Analysis, dated 12/09/2009) later submitted for proposed locations of the maintenance and storage facility described therein.

We own property located at 22 Water Street, Cambridge, Massachusetts, which abuts MBTA land and is near the proposed maintenance facility. Ours is a 2.4-acre parcel within the North Point zoning district. It is contiguous to the MBTA Green Line extension and across the street from the proposed Lechmere station relocation. The property has been permitted for redevelopment into 392 residential units; 2 levels of parking; retail space; and public open space. Great care was taken to design a structure that was sensitive to the needs of current neighborhood residents and integrates well into the existing and proposed transportation network (foot, bike, car, bus, and train). It is a critical component of the ultimate buildout of the North Point district, which is master-planned for approximately 5.3 million square feet of mixed-use development. Significant effort and expense was also taken in designing our building to abate the noise and vibration effects of the Green Line extension, which runs along the length of our property, both for the residents of our building and those who will live and work throughout North Point and neighboring areas.

We applaud the MBTA's commitment to building a new Lechmere station in North Point and to extending Green Line service into Somerville and Medford. Regarding the location of the maintenance and storage facility location, we feel that the original proposal of Yard 8, while operationally suitable, will impact local residents and businesses and consequently may require extensive mitigation.

B-003-001 On the other hand, the Mirror H location would be exceptionally disruptive to the complete buildout of North Point by taking major portions of six separate parcels that represent nearly 1.6

B-003-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

B-003-001 million square feet of potential development – 30% of the entire district. A maintenance and storage facility in this location would have material noise and vibration impacts on our development at 22 Water Street, likely requiring it to be redesigned at significant time and expense. More importantly, this location would jeopardize the whole North Point project, which has been over a decade in planning and where hundreds of millions of dollars already have been invested. The value of the existing and planned investment has been completely overlooked in the analysis of the Mirror H location. The $8 million assumed for acquisition cost grossly underestimates the real estate values that would be affected by this proposal. By incorporating this information into the analysis of Mirror H, it will be quite clear that this location will be far more expensive than what was described in the 12/12/2009 Alternatives Analysis, likely multiples higher. We strongly oppose Mirror H and would like to see the plan dropped from consideration.

B-003-002 We feel that the Option L offers benefits over the other two alternatives and would be the most appropriate location for the maintenance and storage facility. Compared to the expense, permitting delays, and ultimate disruption posed by the Yard 8 and Mirror H locations, Option L appears to be the most manageable to develop and operate. Option L also compares favorably to the others regarding demolition, rail service alignment, and potential remediation. We support Option L and encourage you to proceed accordingly.

B-003-003 We also urge the MBTA to continue refining the new Lechmere station design so that it can function at the highest levels of passenger service, access, and safety as well as be aesthetically pleasing. Concurrent with the station design is the need for a safe and well-functioning pedestrian crossing system of the O'Brien Highway for accessing the station. We expect that the final design focuses on landscaping and materials along Water Street, including pedestrian-friendly circulation and a reduction in the width of curb cuts. Finally we hope that all plans are well landscaped and include well detailed parking lots.

We are excited to see the progress of this major regional transportation project and appreciate the chance to provide input. Feel free to contact me if you have any questions or would like additional information.

Sincerely,



Christopher P. Kaneb, Manager

B-003-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

B-003-003

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

200 West Cummings Park • Woburn, MA 01801 • 781-935-8000 • fax 781-935-1990

December 31, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
Attn: Holly Johnson, MEPA Analyst,
EEA#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 4 2010

Re: EEA# 13886; Green Line Extension Project—DEIR

Dear Secretary Bowles:

Cummings Foundation, Inc. (CFI) is a Massachusetts Not-For-Profit corporation and the effective owner of the properties at 196 and 200 Boston Avenue, Medford. CFI comments on the Green Line Extension project DEIR, filed October 15, 2009, as follows:

1. The DEIR designates the extension of the Green Line to Medford Hillside at College Avenue and to Union Square as the "Proposed Project" and a second-phase .9-mile extension from the College Avenue station to Route 16 as the "Future Full-Build Alternative." The Proposed Project is subject to a completion deadline of December 31, 2014. The Future Full-Build Alternative is to be constructed only as funds become available. The proponent states: "These funds will be available sometime between 2016 and 2020 and may allow this portion of the Green Line extension to be constructed shortly after the 2014 schedule for the Proposed Project has been completed." (DEIR, p. 3-40)
2. The DEIR figures depicting the *lone* design proposal for a Route 16 station show a *very large and likely excessive* driveway passing through the existing parking areas for 196-200 Boston Avenue. (DEIR, Figs. 3.7-27 to 29) In CFI's opinion, this driveway is *very much too large for a neighborhood station* that will be accessed primarily by walking, bicycle and bus, as the project contemplates. (DEIR, p. 3-4) As depicted in Figure 3.7-27, the driveway appears large enough for *dozens* of cars to potentially stand with engines idling while waiting for riders.
3. Figure 3.7-29 shows the projected path of the southbound Green Line track encroaching slightly on the southeast corner of the 200 Boston Avenue office building, appearing to require demolition of a portion of the building, unless the track's path is modified. Reportedly, the Medford Green Line Neighborhood Alliance (MGNA), a Medford citizens' group, appeared before the Medford City Council on November 17 and presented its alternative track layout, demonstrating the feasibility of laying the light rail tracks without interfering at all with this foundation's 200 Boston Avenue building (or the building at 222 Boston Avenue owned by another).
4. It has additionally been reported that MassDOT (through StevenWoelfel) and Vanasse Hangen Brustlin, Inc. (VHB) (through Michael McArdle) also appeared at the November 17 Medford City Council meeting and stated numerous times to the councilors that the Route 16 station design contained in the DEIR was merely a *"worst case scenario for land takings"* at Boston

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Lawrence S. Bacow, J.D., Ph.D.
President, Tufts University
Hon. Margot Botsford
Massachusetts Supreme Judicial Court
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MA House of Representatives (ret.)
Rep. Carol A. Donovan
MA House of Representatives (ret.)
Deborah T. Kochevar, D.V.M., Ph.D.
Dean, Cummings School of Veterinary Medicine at Tufts University
Jason Z. Morris, Ph.D.
Fordham University
Marilyn C. Morris, M.D., M.P.H.
Columbia Presbyterian Hospital
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William F. Grant
CFO, Cummings Properties
Philip C. Kosch, D.V.M., Ph.D.
Dean, Cummings School of Veterinary Medicine at Tufts University (ret.)

B-004-001

B-004-002

B-004-003

B-004-001

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

B-004-002

Please see response to Comment B-004-001

B-004-003

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

B-004-003 Avenue and that MassDOT has already been working on designs that *would eliminate any need* to acquire the office buildings at 200 and 222 Boston Avenue.

B-004-004
5. The December 1, 2006 Certificate of the Secretary of EOEA on the Expanded Environmental Notification Form (EENF Certificate) directs that "[t]he DEIR should identify temporary and permanent land takings." (EENF Certificate, p. 5)
6. Under the heading "Land Acquisitions and Easements," the DEIR states: "For purposes of planning, the ***maximum*** property impacts of the Project have been identified and evaluated in the DEIR. As the Project progresses through preliminary engineering and final design, ***EOT will strive to refine*** the designs in an effort to further minimize property acquisitions and have the least possible impact on local neighborhood and property owners." (Emphasis supplied) (DEIR, p. 3-42). Prior to any future refinement as EOT may determine, the DEIR identifies the 200 Boston Avenue property as subject to a ***maximum whole*** property taking, but with the Future Full-Build Alternative only. (DEIR, p. 3-43)

B-004-005
7. CFI submits the DEIR fails to identify temporary and permanent land takings with the specificity necessary to comply with the Secretary's EENF Certificate. As CFI wrote to public participation coordinator Regina Villa Associates on February 14, 2008, 200 Boston Avenue is a four-story 210,000 sq. ft. office building in which approximately 700 individuals work or visit each regular workday. The city of Medford relies on tax revenues from the building, the individuals who work in the building rely on the businesses located there for their livelihoods, and the businesses that support Medford's and the surrounding municipalities' economies need to be able to plan for their organizations' futures. Given the very vague DEIR statement on a potential for land taking at 200 Boston Avenue, it would be exceptionally unfair to the city of Medford and the businesses and employees in the 200 Boston Avenue building if the proponent were to successfully petition the Secretary for review of this DEIR as a FEIR.

B-004-006 In conclusion, CFI requests the Secretary to direct the proponent to file a FEIR, which identifies ***with reasonable specificity*** any need the project may have for temporary and permanent land takings under the Future Full-Build Alternative. ***Acceptance of the DEIR – which contains proponent's "worst case scenario" for "maximum potential" land takings only -- as a FEIR would potentially irrevocably damage many of the stakeholders interested in the ultimate disposition of the 200 Boston Avenue property, including the property's business occupants, their employees, the property owner, and the city of Medford.***

Thank you for your consideration. Please contact me with any questions regarding these comments.

Sincerely,

CUMMINGS FOUNDATION, INC.

Joel B. Swets
Executive Director

B-004-004

Please see response to Comment B-004-003.

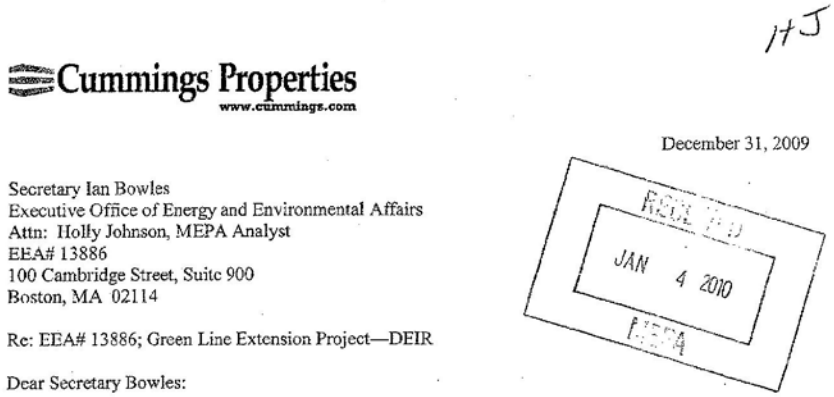
B-004-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

B-004-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

HJ



Cummings Properties
www.cummings.com

December 31, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 4 2010
MEPA

Re: EEA# 13886; Green Line Extension Project—DEIR

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford. My firm, Cummings Properties (CPL), is the developer and operator of office and research buildings at 196-200 Boston Avenue on parcels that adjoin the proposed Route 16 station under the Future Full-Build Alternative.

B-005-001 While CPL has always been a consistent supporter of mass transit and finds much to applaud in this DEIR, CPL nevertheless strongly urges you ***not*** to accept this DEIR as the Final EIR and to require further and more detailed analysis of any land taking needs at Boston Avenue. While according to the DEIR, ***no*** land taking will occur at 200 Boston Avenue if additional separate funding for the .9-mile Phase II extension from the College Avenue station to Route 16 cannot be found, the DEIR asserts that appropriate funding will become available between 2016 and 2020.

B-005-002 Put simply, the Route 16 station design included in the DEIR is inadequate. The current document offers only a "worst case scenario" (reportedly MassDOT's own description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. It is our firm's position that MassDOT should revisit the Route 16 station design.

B-005-003 The Medford Green Line Neighborhood Alliance (MGNA), a Medford citizens' group, has offered an alternative station design that averts ***two*** major commercial property acquisitions (200 and 222 Boston Avenue) thereby greatly reducing project costs, preserving businesses and jobs in Medford, avoiding harmful disruption to dozens of businesses, and preserving substantial property taxes for the city of Medford. This MGNA alternative station design reportedly also optimizes traffic flow and better serves the integrity of the station's surroundings. After filing its DEIR, MassDOT has reportedly been exploring similar improved designs, but no such new and improved MassDOT designs have yet been published and vetted by public comment.

B-005-004 In CPL's judgment, the DEIR filed with the Secretary on October 15 is deficient as a Final EIR, and should not be accepted as such, at least as regards the Future Full-Build Alternative's .9-mile extension to Route 16. MassDOT should consider the MGNA alternative station design for the Route 16 location, and should present its own improved Route 16 design(s) for public comment, before proceeding through preliminary engineering to final project designs and construction.

Thank you for your consideration. Please contact me with questions regarding this comment.

Sincerely,

CUMMINGS PROPERTIES, LLC

Dennis Clarke

Dennis A. Clarke
President and CEO

B-005-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

B-005-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

B-005-003

Various community groups have suggested modified concepts for the Mystic Valley Parkway/Route 16 Station. Preliminary evaluation of these concepts showed that the cost of constructing the Green Line Extension to Mystic Valley Parkway/Route 16 would not be reduced sufficiently to be able to be funded at this time. Additional evaluation of the concept as it relates to the MBTA's design standards, operations and other requirements would be necessary in order to determine the full cost savings of a redesigned station. While MassDOT has not been required to revisit the design of this station as part of the FEIR document, further

evaluations may consider the redesign options presented by the MGNA in future analyses.

B-005-004

Please see response to Comment B-005-001.

Johnson, Holly (EEA)

From: Brendan Driscoll [BDriscoll@DriscollElectric.net]
Sent: Tuesday, December 29, 2009 7:54 AM
To: Johnson, Holly S (ENV); Brendan Driscoll
Subject: Green Line Extension Draft Environmental Impact Report

Good morning,

I am writing to express my concern with the impacts the proposed Green Line Extension project will have on 3 properties I own in Medford.

B-006-001

1. 83 Newbern Avenue, Medford (Direct abutter) My business currently occupies this property. Once completed the relocated commuter rail tracks (outbound) will be located within feet of our building. Existing commuter rail operations currently shake the building and are extremely noisy. I am concerned that relating the tracks closer to the building will logically make things worse. Noise and vibration reports on the project's website confirm that there will be significant impact on my property.
2. 86 Morton Avenue, Medford (Direct abutter) We currently lease this commercial building to a painting/ general contracting firm. Once completed the relocated commuter rail tracks (outbound) will be located within feet of our building. Existing commuter rail operations currently shake the building and are extremely noisy. I am concerned that relating the tracks closer to the building will logically make things worse. Noise and vibration reports on the project's website confirm that there will be significant impact on my property.
3. 82- 84 Morton Ave., Medford (Located adjacent to 86 Morton Ave., Medford) This is a 3 family property that we own which was a gut renovation approximately 4 years ago. Building has been fully rented to professionals since renovation was completed. I am concerned that increase noise and vibration caused by both the Green Line and relocated Commuter Rail will negatively affect rental values and our ability to rent the units.

Regards

driscoll
ELECTRIC CO., INC.

Brendan Driscoll
President

Main Office
83 Newbern Ave. Medford, MA 02155
T: 781-393-9299 I F:781-393-9393

Cape Office
15 Jan Sebastian Dr. Sandwich, MA 02563
T: 508-833-4915 I F: 508-833-4917
www.driscollelectric.net

Please consider the environment before printing this email

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B-006-001

DEIR/EA Sections 5.7, Noise, and 5.8, Vibration, describe the noise and vibration impacts, respectively, expected from the Project. Pursuant to FTA-established guidelines, these impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments, describes the mitigation measures that would be implemented to eliminate, minimize, or offset impacts above regulatory thresholds.

Johnson, Holly (EEA)

From: Richard Nilsson [Richard.Nilsson@nilssonassociates.us]
Sent: Friday, January 08, 2010 5:20 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886 Review Comments EEA #13886

Importance: High

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Email: Holly.S.Johnson@state.ma.us
Fax: 617-626-1181

Dear Secretary Bowles:

B-007-001 Please do not short-cut the study process by eliminating the requirement of a full EIR in this case.

B-007-002 Please consider seperating the new maintainence facility for independant study including review by a local advisory group. Consider also that the proposed maintainence facility in the size proposed could limit the benefit of the extension. Reduce the size of the facility and incorporate the new facility on DOT land and not on any privately owned land in Somerville that has development potential.

Please do not forget that the extension project is require as a mitigation measure and to burden Somerville with a loss of land that otherwise has remarkable economic development potential will be an unfair burden. The size of the proposed maintainence facility seems greatly out of proportion with the approximately four miles of light rail track that is being added.

Please accept also the following review comments, that you will be familiar with from other sources as my own:

Station Design & Siting

B-007-003
- Green Line stations must connect as seamlessly as possible with all other clean modes of transportation, including current and re-routed buses. Station design should accommodate bus drop off and pick-up with maximum integration of transit modes and minimal street disruption.
- Station designs should allow for car drop off, but not parking, and present ease of pedestrian and bicycle access by location of stations on major streets whenever possible, with station access from both sides of the street and in all direction of travel. This will maximize transit use.
- Station and station area designs must be developed through a formal community participation process to ensure that they fit into existing neighborhoods and support appropriate future mixed use development. Takings should be minimized to save the state money and to preserve land uses.

B-007-004
- Design for the project terminus at Lechmere Square should pay particular attention to the East Cambridge Planning Team's pedestrian friendly area design ideas and old Lechmere Station re-use suggestions. The terminus at Route 16 should incorporate MGNA's ideas for minimizing takings.

Community Path Integration & Preservation of Corridor Transit Potential

B-007-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

B-007-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

B-007-003

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA to evaluate opportunities to improve connections between existing bus routes and proposed stations. Where appropriate, automobile drop-off / pick-up locations will be provided at Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

B-007-004

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. In accordance with the Secretary's Certificate on the DEIR/EA, the FEIR (Chapter 5, Lechmere Station) includes only conceptual station designs. Plans for stations, the storage and maintenance facility, and all project elements will be refined during the preliminary engineering stage of the Project. MassDOT intends to demolish the existing Lechmere Station and

B-007-005 • Track design and construction should enable adding future stations - between Lechmere and Washington Street / Union Square, between College Avenue and Route 16, and along a future Green Line extension to Porter Square that could serve both Cambridge and Somerville neighborhoods.

B-007-006 • The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

Economic Development & Regional Corridor Planning

B-007-007 • Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a neighborhood and local business friendly boulevard. Improved connectivity to both sides of Route 28 is crucial.

B-007-008 • State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts. Maintaining diversity in people and businesses while improving the natural environment is critical. Access to open space and greenery promotes health.

B-007-009

Maintenance Facility & Regional Environmental Justice

B-007-010 • More detailed analysis of Mirror H and Option L is necessary. The siting of the maintenance facility and storage yards should not increase the transportation infrastructure and environmental burdens in Somerville or interfere with proposed economic development in the Brickbottom Inner Belt area.

B-007-011 • Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston needs to be phased out and a new facility built south of Boston to eliminate the unsustainable and unjustifiable shuttling of trains through Cambridge.

Public Participation

B-007-012 • MEPA should require collaborative planning, with community involvement and public coordination that should intensify immediately, before this project progresses. A staffed field office should be required, before construction start, to address resident concerns and facilitate involvement.

• A project-wide Citizens Advisory Group should be maintained throughout detailed design, engineering, construction and start-up phases with additional smaller local advisory groups established for specific station design, land use, connectivity, construction and mitigation issues.

B-007-013 • A procedure for determining remedies and/or compensation, incorporating community representation, should be required to handle instances when project mitigation proves insufficient to meet pre-agreed impact standards for noise, vibration, pollution and other environmental burdens.

Sincerely yours,

Richard Nilsson, AIA, LEED AP
President and CEO

Nilsson Associates, Ltd.
Architecture + Planning + Interiors
51 Russell Road, Somerville, MA 02144
P: (617) 623-1266 F: (617) 623-6066 M: (857) 928-6773
W: http://www.NilssonAssociates.US
E: Richard.Nilsson@NilssonAssociates.US

prepare the site for future redevelopment. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during project design.

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

B-007-005

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

B-007-006

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

B-007-007

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor

initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

B-007-008

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

B-007-009

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

B-007-010

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter

2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

B-007-011

Major modifications to operations of the Boston Engine Terminal (BET), MBTA Commuter Rail and other railroads, and railroad vehicles are beyond the scope of the Green Line Extension Project.

B-007-012

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

B-007-013

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

PAN AM RAILWAYS
IRON HORSE PARK
NO. BILLERICA, MA 01862

January 8, 2010

RECEIVED
JAN 11 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn. Holly Johnson—MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Green Line Extension Project
Draft Environmental Impact Report

Dear Ms. Johnson:

Over the past several years, Pan Am Railways ("PAR") has repeatedly expressed its commitment to the success of the Green Line Extension project (the "Project"), and has worked closely with representatives of several agencies of the Commonwealth and their consultants to assist in the conceptual design of the Project. After reviewing the Draft Environmental Impact Report ("DEIR") for the Project, however, PAR feels compelled to point out certain inaccuracies regarding the impact of the Project on freight rail service as well as the status of Yard 8.

B-008-001

PAR understands that Yard 8 is the preferred alternative for the location of a maintenance facility during construction of the Project, and has had multiple conversations with state officials regarding an acquisition of this parcel by the MBTA. However, at this point no agreement has been reached, and Yard 8 remains an integral part of PAR's freight operations to serve its customers in the Boston area and on the North Shore. Accordingly, while PAR would like to continue to work cooperatively to assist with the Project, it is important to recognize that the Project will adversely affect PAR's ability to provide freight service if alternative arrangements—if any exist—cannot be mutually agreed upon.

B-008-002

Furthermore, the DEIR states that PAR could utilize the Yard 10 lead track to bypass Yard 8 and continue freight operations in much the same manner as it does today, but this is not a correct assumption. To the contrary, this option has never been fully

B-008-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

B-008-002

During preliminary engineering, MassDOT will coordinate with PAR on track rights and PAR service in the Study Area.

B-008-002

investigated and preliminary analysis indicates that development and encroachments along this track would make it extremely difficult to perform freight service, even if the line were rehabilitated to a standard that would permit operations. Moreover, as a result of the unavailability of this connection, the so-called Third and Fourth Irons remain the sole freight only connection to Yard 8 and are critical to the continuation of freight service in this area at present and reasonably foreseeable levels and would have to be replaced if needed to be removed for the Project.

B-008-003

Recently PAR was also informed that its current connection between Yard 8 and the tracks utilized to service customers—commonly known as the "Willey Track"— and possibly other tracks will need to be removed or altered to accommodate the Project. Should this be necessary, the connection to provide freight service to Boston area and North Shore customers would be compromised, again with no presently viable alternatives to adequately mitigate the effects of this lost connection short of replacement. Importantly, the adverse effects on freight service brought about by this change will occur regardless of the status of Yard 8, absent a mutually acceptable agreement on alternative service options, should such options even exist.

In closing, PAR would like to reiterate its support for the Project and its willingness to continue to cooperate with the relevant agencies to resolve these issues. Notwithstanding the challenges presented by existing circumstance, we hope that alternatives can be identified and implemented in a manner that will both speed the progress of the Project and lower its cost. Toward that end, PAR remains willing to meet with the appropriate agencies to explore solutions to these complex problems.

Thank you for your attention to this matter. Please feel free to contact me if you should have any questions or comments.

Sincerely,

Roger D. Bergeron

Roger D. Bergeron
Vice President
Special Projects

B-008-003

During preliminary engineering, MassDOT will coordinate with PAR on track rights and PAR service in the Study Area.

From: 01/07/2010 22:07 #010 P.001

01/07/2010 13:22 607-535-0538 PAT MASON PAGE 01

SOUTH BAY PROPERTIES LLC I
138 Haverhill Street, Suite 104
Andover, MA 01810
Telephone: (607) 535-0537
Fax: (607) 535-0538
Email: pjmason@verizon.net

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

We are the owners of units 304 & 307 in the Glass Factory condominiums. We own these as investment properties and have concerns about the Green Line extension impacting the desirability of these as rental properties. We are also concerned about the future value of these properties if the design and location of the new Lechmere Station are not improved.

B-009-001 We are particularly alarmed by the horrendous design of the new station. Building something this unattractive will surely lower our property values. We expected a station more along the lines of the new station at Charles MGH, or the beautifully designed glass station that had been proposed by the North Point developers. We request you substantially improve the design and quality of this station to make it consistent with the upscale neighborhood that is developing in North Point and the surrounding areas.

The station is located too close to the Glass Factory. It looms over our landscaped parking area and reduces our green space. It is uncomfortably close to our building and will certainly lower property values. We suggest putting the station closer to the corner of East Street and Msgr. O'Brien Highway. Here it would give this visible corner a sense of importance. Most of the outdoor parking could then be hidden behind the station.

B-009-002 We are concerned about impacts during construction and hope you will do all you can to minimize noise, provide adequate screening and maintain easy access to the Glass Factory during construction so our tenants will not be disturbed during the construction.

B-009-003 We are concerned that the tracks and busway behind the building will severely reduce the value of the units facing the rear of the building. Many owners would be forced into foreclosure and values throughout the whole building would be affected. We request you position the tracks and busses as far away as possible to protect the value of the 50% the building that faces the rear. We also want the green space to be left as is.

B-009-004 We strongly oppose locating the Mirror H maintenance facility behind the Glass Factory. We purchased our units here with the understanding there would eventually be additional residential development as well as offices and a hotel in the area behind the building. The maintenance facility would make this positive development impossible.

Sincerely yours,

Patricia J. Mason
Administrator and Authorized Agent

B-009-001

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

B-009-002

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

B-009-003

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

B-009-004

An expanded technical and environmental analysis of the light rail

storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Fichter, Katherine (DOT) [Katherine.Fichter@state.ma.us]
Sent: Monday, November 30, 2009 4:59 PM
To: Johnson, Holly S (ENV)
Cc: Woelfel, Steve (DOT)
Subject: GLX DEIR Hearing - Official Transcript
Attachments: GLX DEIR Hearing Transcript - 11.18.2009.pdf

Holly -

Attached, please find the official transcript from the Green Line Extension DEIR hearing. Do I need to more formally submit it to make it part of the public comment record, or is this sufficient?

Thank you!
Kate

<<GLX DEIR Hearing Transcript - 11.18.2009.pdf>>

Kate Fichter
Office of Transportation Planning
Massachusetts Department of Transportation
Ten Park Plaza, Room 4150
Boston, MA 02116
617.973.7342

GREEN LINE EXTENSION - PUBLIC HEARING

The Public Hearing Concerning
The Green Line Extension Project
Draft Environmental Impact Report/
Environmental Assessment

Wednesday, November 18, 2009

APPEARANCES:

Nancy Farrell (Presenter / Moderator)

Katherine S. Fichter, (Presenter)
Massachusetts Department of Transportation
Office of Transportation Planning

CAMBRIDGE TRANSCRIPTIONS
675 Massachusetts Avenue
Cambridge, MA 02139
(617) 547 - 5690
www.ctran.com

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PROCEEDINGS

MS. KATHERINE FICHTER: I think I'm going to start. We are waiting for the Mayor of Somerville, who is on his way. He is dealing with automobile traffic since we don't have the Green Line Extension yet. But I'm going to start just by explaining a little bit about what we're going to do this evening, and then my colleague Nancy is going to talk a little bit more just about the structure of how we're going run the comments. And by then, hopefully the Mayor will be here to speak to us, and then I'll go into the longer presentation that you see before me -- or behind me.

Welcome, everybody. My name is Kate Fichter. I am the Manager of Long-Range Transportation Planning for the Commonwealth of Massachusetts. I am also the Project --

[Applause]

MS. KATHERINE FICHTER: -- thank you. I am also the Project Manager for the Green Line Extension Project and, for people who are followers of this project, we are three years plus a month since we gathered in this room to kick off this phase of the environmental review process for the Green Line Extension; and I could not be more thrilled than to be here tonight. This is a huge milestone, and a lot of credit is due to the people who are sitting here,

who have worked with us and pushed us and never given up and never gotten bored; and I am just really, really happy to see everybody here tonight.

I'm going to start by defining two acronyms that I'm going to be using a lot tonight. The first is MassDOT, which stands for the Massachusetts Department of Transportation. A lot of people who've come to our meetings have heard me use the term "EOT" a lot in the past, which is the Executive Office of Transportation. On November first, we changed our name. We changed our mission, and we changed our organizational structure. So going forward, unless I slip up -- and please forgive me if I do -- you will hear me use the term "MassDOT."

The other acronym I'm going to use a lot is the DEIR, which is the Draft Environmental Impact Report, which is this document. This is the document that we are here to discuss tonight. This is a major overview study of the environmental impacts of the Green Line Extension Project as we understand them now. I'll talk in more detail about what this document is, but I'm going to be using that term a lot tonight, so is probably everyone who speaks. So I just wanted to be clear that people knew what it was: and if you picked up a copy of the Fact Sheet, which I hope that you did on your way in and -- if you don't, please, on your way out -- that talks more about it as well.

Just a few basics before we get going. For the people who've seen me speak before, who've seen us run public meetings for this project before, we typically have a lot of give and take. People speak, I answer. We have some conversation, some dialogue. Tonight is not really going to be like that. This is a more formal event. I'm going to do my presentation. Then Nancy and I are going to sit. Nancy's going to help run the comments to keep everything going smoothly, but really this is more like a listening session. This is a time for the public to have the floor. We're here to listen to you. Everything that you say is being recorded by a professional stenographer.

We're also encouraging people to separately submit written comments, and there's information on how to do that in the Fact Sheet. It's also on the project website. So it's going to be more formal. I'm not going to be speaking very much until the end. So I just didn't want people to be frustrated when I wasn't responding; and for people who like to hear me talk, this might be disappointing, it might not. We will do responses in writing as we finalize the Environmental Impact Report; but for tonight, it's mainly going to be you having the stage.

So everybody knows, we've got a big crowd here tonight. I know we've got a long list of people who want to speak, and we are asking people to sign up if you want

to speak. We will stay here until every last person who wants to speak has had a chance to speak. If you're the last person, you may be speaking to an empty room, but we will still be here. So I didn't want people to get concerned that we were going to cut you off at some point. We're also being recorded by Somerville Cable. So if you speak tonight, you have a chance of being on TV. And the only other think I wanted to say is my parents are here tonight. So please be gentle and help make me look good. Okay. So I'm going to have Nancy just explain a little a bit about how we're going to go tonight and then, hopefully, the Mayor will speak.

MS. NANCY FARRELL: Thanks, Kate, and welcome to everyone. I'm very happy to see you and to be with you this evening. This is the public hearing on the Green Line Extension DEIREA. The EA part is the Environmental Assessment. As Kate said, the team will not be responding to your questions tonight, and sometimes that can be a little frustrating. Kate will want to respond to your questions, and I will have to do this to her to stop her. So please understand that this is for you to get your opinions on the record, and that's the purpose of the hearing.

Because there are so many people who do want to speak, we are going to ask you to limit your comments to

two minutes. Now, you can say a lot in two minutes, believe me, because I've done a lot of these meetings. I will raise my hand when you reach the end of your two minutes, ask you to wrap up your remarks; and if you go over, then I will have to ask you to be polite and to stop talking.

At the end of the night after everyone's had a chance to speak, if you are burning to have another two minutes, you can approach the microphone. We have a sign-in sheet in the back for speakers, and we have a sign-in sheet for elected official speakers. I am actually going to ask the elected officials to also stay to the two-minute limit, just so you know that. I will recognize them first, however, because they often have to go to another meeting.

So please, if you want to speak, be sure to sign up to be recognized. I already have thirty-three speakers who have signed up. I will read the names three at a time. You don't have to line up at the microphone, but that will let you know that your name is coming up. You'll come to this microphone right here in the front in the center. You can speak to Kate and me. If you'd rather turn around and speak to everyone else, you're welcome to do that as well. I ask you always to be courteous and respectful of everyone else's opinion.

So if the Mayor is here -- ah, here he is. I

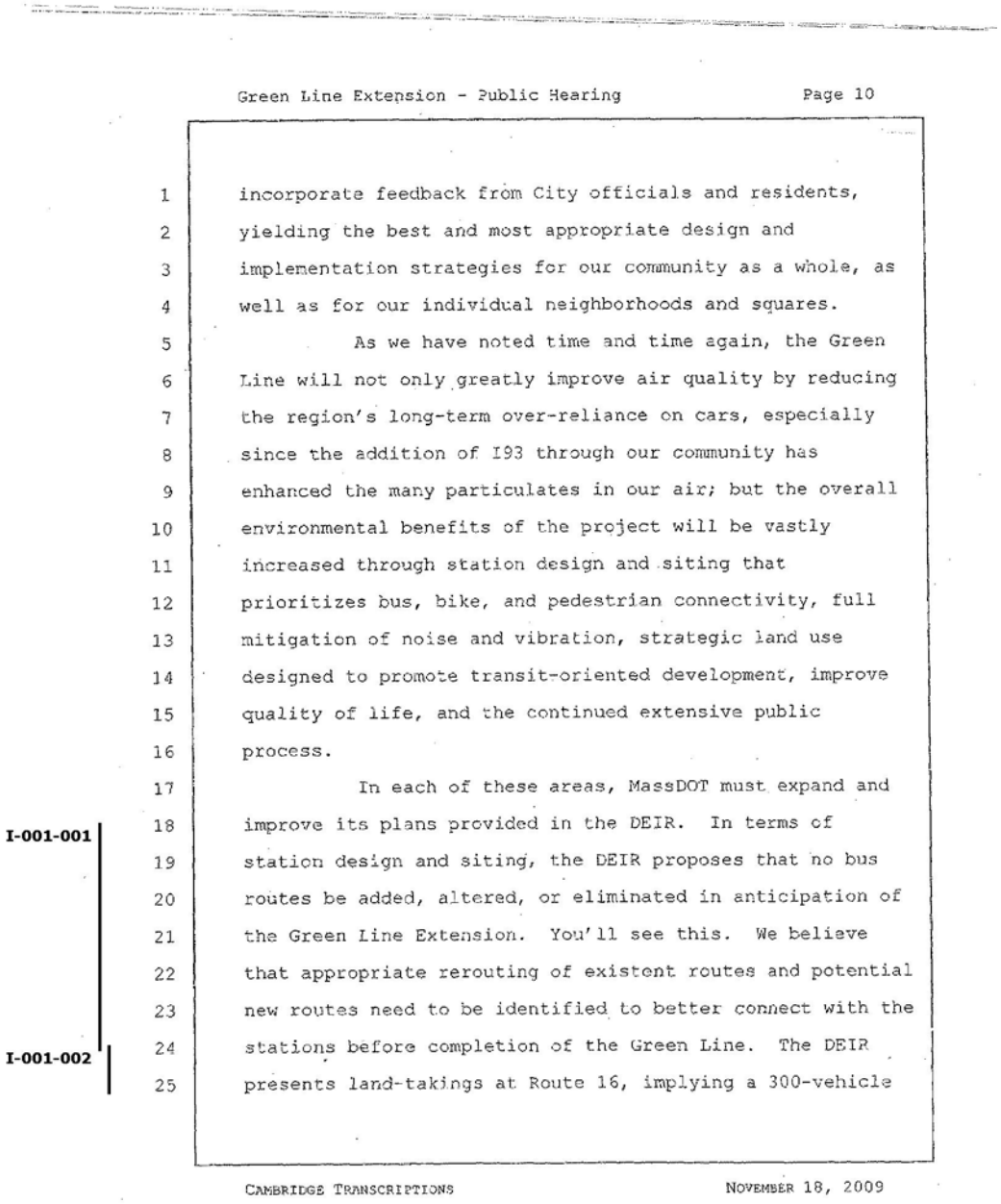
will introduce Mayor Joseph Curtatone to make a few remarks, and then we will start the presentation, which will go pretty briskly, and then we will be very anxious to hear what you have to say.

MAYOR JOSEPH CURTATONE: Thank you, Nancy. To Kate's parents, she's doing a fantastic job. I really love her. How about a round of applause for Kate's parents, right? First, I'm going to be over two minutes. I'm just going to be upfront, and I have to leave early, I apologize. I usually stay for the whole thing. I have a son down at the skating rink at hockey practice. I have to drive him home.

Members of the state delegation could not be here this could not be here this evening. They are in session. Full support of this project, I want to thank them for their help. As well, the members of the Somerville Board of Aldermen may be trickling in. They have community meetings going on tonight. But we want to welcome and thank MassDOT officials and all the elected officials representing this community from the community, including Somerville Transportation Equity Partnership, all the stakeholders in this city, the business community, my staff at the Office of Strategic Planning and Community Development, and Governor Patrick and former Secretary of EOT, James Aloisi, for his hard work.

But on behalf of the City and our residents, businesses, and employees, I applaud the release of the Green Line Extension Draft Environmental Impact Report, and offer sincere thanks, again, to MassDOT for committing to a few things, a Route 16 terminus, full design of the Community Path, and an analysis of alternate locations for the maintenance facility. It's been mentioned, the DEIR does represent a critical phase in the public evaluation process and allows for preliminary engineering to begin, which we've been waiting for for a long time. To that end, the City welcomes the opportunity to comment on MassDOT's work thus far, and I strongly encourage all of you, residents and business owners, to offer written comment prior to January 8, 2010.

In framing those comments and responding to this draft EIR, we need to bear in mind that enhanced transit is not only a worthy goal in its own right, but it is the key to addressing a wide range of urban development goals and complementing the City's overall planning, environmental, and quality of life initiatives. Now, with these goals in mind, we need to be sure that this project is fully integrated into our larger vision for Somerville's future, that it contributes to the solution of existing problems, while anticipating future needs. We will, therefore, continue to work to ensure that the future plans and phases



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incorporate feedback from City officials and residents, yielding the best and most appropriate design and implementation strategies for our community as a whole, as well as for our individual neighborhoods and squares.

As we have noted time and time again, the Green Line will not only greatly improve air quality by reducing the region's long-term over-reliance on cars, especially since the addition of I93 through our community has enhanced the many particulates in our air; but the overall environmental benefits of the project will be vastly increased through station design and siting that prioritizes bus, bike, and pedestrian connectivity, full mitigation of noise and vibration, strategic land use designed to promote transit-oriented development, improve quality of life, and the continued extensive public process.

In each of these areas, MassDOT must expand and improve its plans provided in the DEIR. In terms of station design and siting, the DEIR proposes that no bus routes be added, altered, or eliminated in anticipation of the Green Line Extension. You'll see this. We believe that appropriate rerouting of existent routes and potential new routes need to be identified to better connect with the stations before completion of the Green Line. The DEIR presents land-takings at Route 16, implying a 300-vehicle

I-001-001

I-001-002

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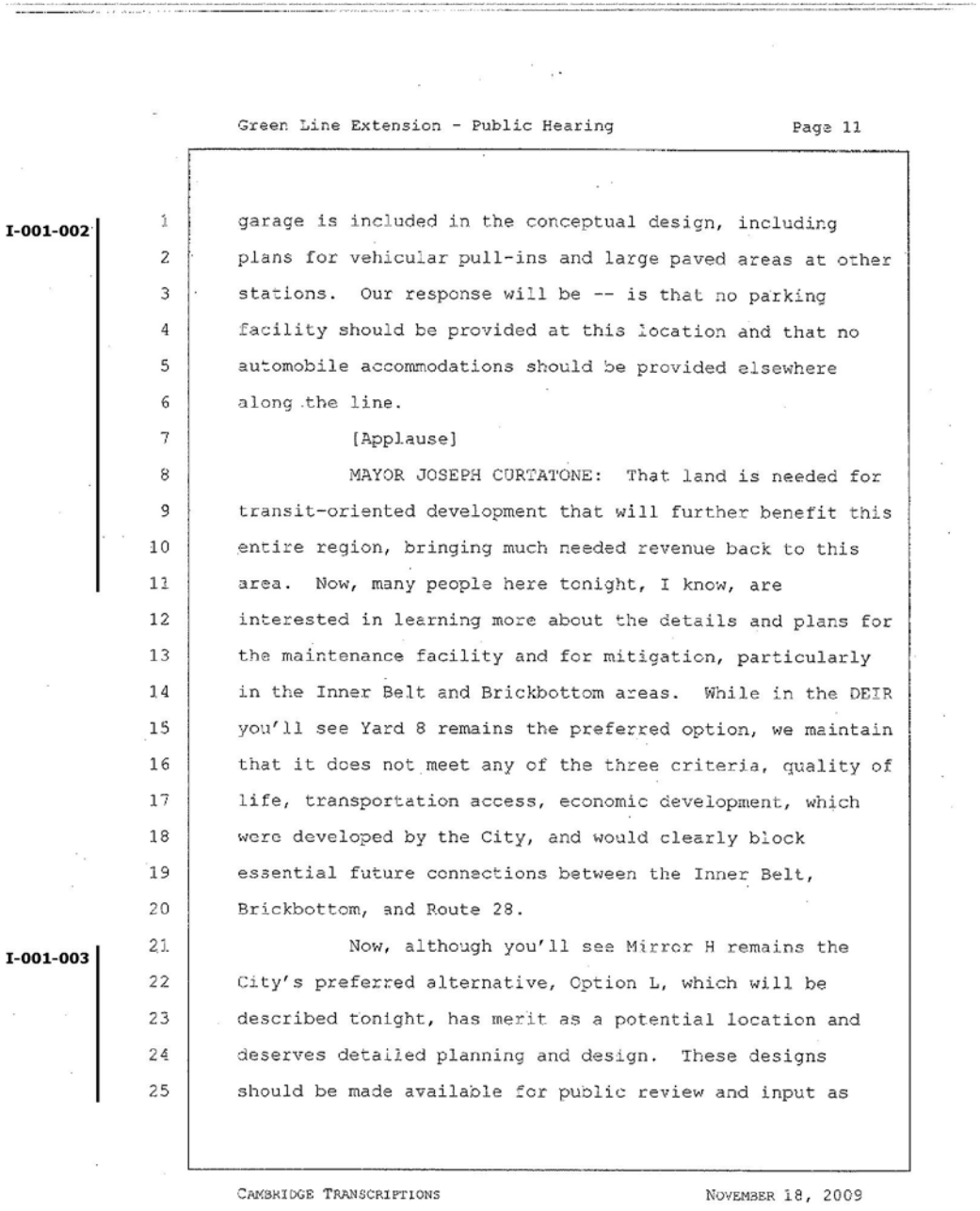
I-001-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-002

Although the proposed station layout did not include parking, A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are no longer included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



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garage is included in the conceptual design, including plans for vehicular pull-ins and large paved areas at other stations. Our response will be -- is that no parking facility should be provided at this location and that no automobile accommodations should be provided elsewhere along the line.

[Applause]

MAYOR JOSEPH CURTATONE: That land is needed for transit-oriented development that will further benefit this entire region, bringing much needed revenue back to this area. Now, many people here tonight, I know, are interested in learning more about the details and plans for the maintenance facility and for mitigation, particularly in the Inner Belt and Brickbottom areas. While in the DEIR you'll see Yard 8 remains the preferred option, we maintain that it does not meet any of the three criteria, quality of life, transportation access, economic development, which were developed by the City, and would clearly block essential future connections between the Inner Belt, Brickbottom, and Route 28.

Now, although you'll see Mirror H remains the City's preferred alternative, Option L, which will be described tonight, has merit as a potential location and deserves detailed planning and design. These designs should be made available for public review and input as

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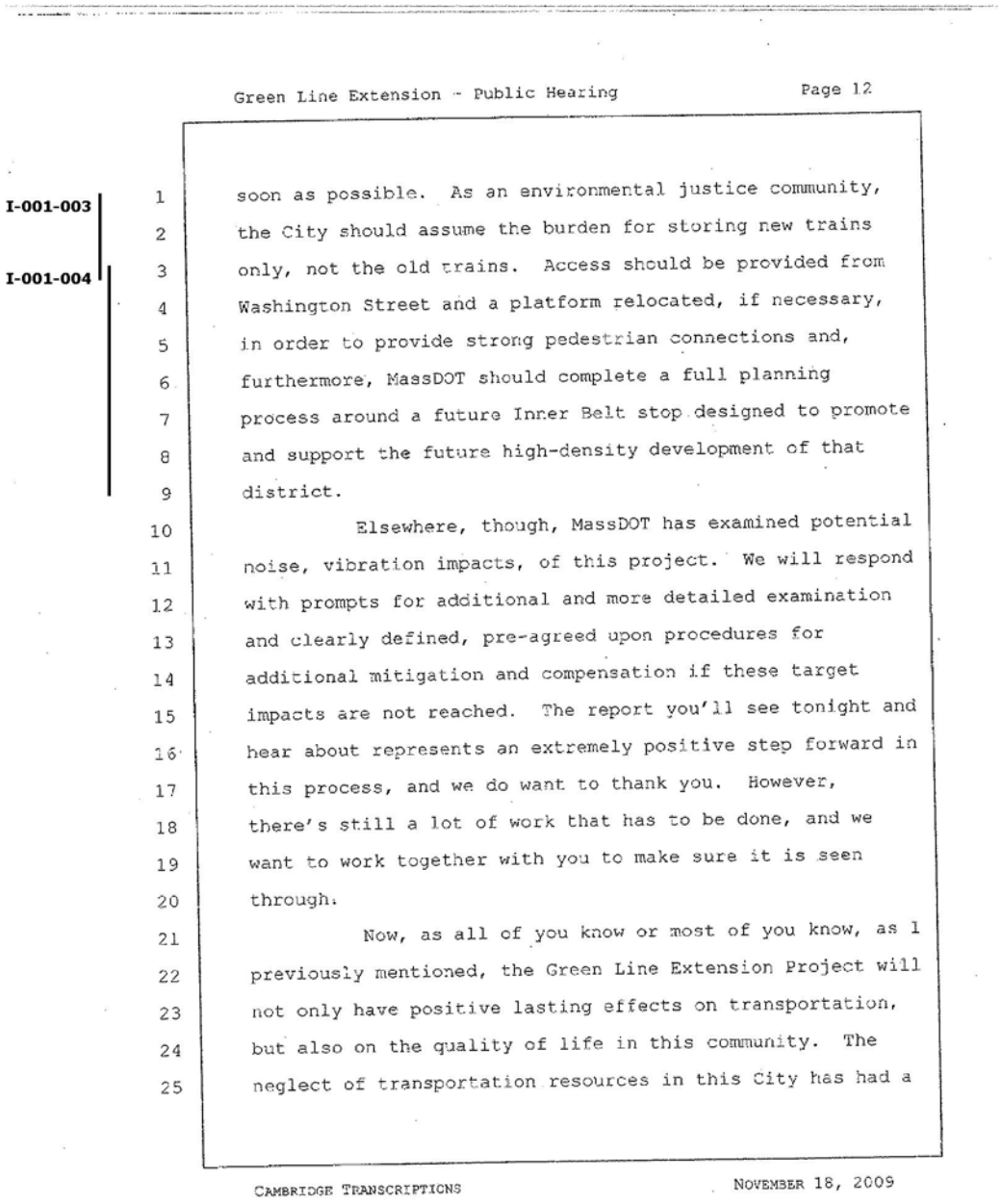
I-001-002

I-001-003

I-001-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



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I-001-003

I-001-004

soon as possible. As an environmental justice community, the City should assume the burden for storing new trains only, not the old trains. Access should be provided from Washington Street and a platform relocated, if necessary, in order to provide strong pedestrian connections and, furthermore, MassDOT should complete a full planning process around a future Inner Belt stop designed to promote and support the future high-density development of that district.

Elsewhere, though, MassDOT has examined potential noise, vibration impacts, of this project. We will respond with prompts for additional and more detailed examination and clearly defined, pre-agreed upon procedures for additional mitigation and compensation if these target impacts are not reached. The report you'll see tonight and hear about represents an extremely positive step forward in this process, and we do want to thank you. However, there's still a lot of work that has to be done, and we want to work together with you to make sure it is seen through.

Now, as all of you know or most of you know, as I previously mentioned, the Green Line Extension Project will not only have positive lasting effects on transportation, but also on the quality of life in this community. The neglect of transportation resources in this City has had a

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I-001-004

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan, Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station location and design in particular can motivate transit-oriented development, a Commonwealth goal for smart growth land use, which could further reduce automobile congestion and improve air quality.

negative consequential effect on our neighborhoods for decades. The extension of the Community Path now directly coincides with the Green Line Extension; and the report, as you will see and it appears, presents only fragments of the path at various stations, with no unified conceptual plan. We will stand firm by our mutual agreement and verbal commitment by MassDOT to include a one hundred percent design as an essential element in the Green Line Extension Plan.

I-001-005

We'll also stand by our contention that it is essential that both projects, the Green Line Extension and the Community Path extension, be constructed simultaneously. And I am confident --

I-001-006

[Applause]

MAYOR JOSEPH CURTATONE: I am confident that the officials from MassDOT and all other participating state agencies will also agree with me that community involvement and public coordination should, and must, intensify as this project progresses. Therefore, again, we encourage everyone here this evening to submit written feedback by January 8, 2010, as we all work together to ensure the final plan preserves the character and identity of each individual neighborhood.

Again, I want to thank you for coming here tonight. I do want to thank the new Secretary Mullan,

I-001-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-001-006

Please see response to Comment I-001-005.

former Secretary Aloisi, and the Governor, for their commitment to see this project through. Let's make sure we do it right. It's a one-short deal. Thank you very much.

MS. KATHERINE FICHTER: I actually want to start by echoing and seconding something the Mayor said which is that, while all of us here in this room have done a lot of work, we still have a long way to go; and that's something we need to do cooperatively, and it's something that I want you to keep mind when you're thinking about commenting -- as I hear the train. The designs and the plans and the recommendations that you see here represent about a ten percent level. So although, as I say, we've done a lot, we have a long way to go, and we're looking to you for input, ideas, suggestions. Just keep in mind that we're early, and we're going to be back a lot.

Actually, one thing I meant to do earlier and forgot, can everybody please who's in the room who's a member of the Green Line Extension Project Team just stand up or wave. I just want people to recognize you and know who you are. Don't be shy. Most of them are hiding over here. But just so you know, if you do want to talk to anybody after, that would be great. The other thing is, folks hugging the back wall, don't be shy. Feel free to come on in.

Okay. So let's get going for real. So why are

we here? As I said, we are here because we have released the Draft Environmental Impact Report/Environmental Assessment for the Green Line Extension. Just in case anyone was wondering, the reason why it has two names -- the first part of it actually represents the state environmental requirement, which is this report. The second piece, the Environmental Assessment, is the federal environmental requirement. We are doing these in conjunction, which has some benefits and some negatives; but that's why we always call it the DEIREA, which is quite a mouthful.

As we said, this is a comprehensive assessment of the environmental impacts of the project, presents the conceptual project design, which is about the ten percent level; and it's also a preliminary discussion of what we would be proposing for some of the mitigation options to offset some of the impacts that we're seeing. We're doing the public hearing. We talked about that, and there's a transcript being made that will be part of the official record.

Again, just to reiterate, we are early in the process. This is a sort of awkward table, but it gives you just a sense of what we've done and how far we have to go. I'll be talking a bit more about some of these steps, but really this is just a visual to give you a sense of where

we are, and you see the yellow circle on the bottom.

So what happens after tonight? As I say, we recommend, please, if you have the time, think about submitting your comments on your own. Even though we're keeping a record, it's best to have -- you have a chance to say them as you want to in your words, and they'll go directly to the Secretary of Environmental Affairs; and they will be informed by those comments when they scope us for our further work on this effort.

This other point is very important. We had a lot of public requests that we extend the comment period beyond its original date. We know that this is a big document. This actually has to companion pieces that are not here tonight. So we've given people until January eighth. That's about as far as we feel like we can go and keep the project moving. So anything you submit should be in by January eighth; and again, the information for how to do that is in the Fact Sheet, and it's also on our project website.

Just very quickly, in case we have people who haven't been following the project so carefully, how did we get here? Some sort of mass transit service running out of Lechmere northwest into this area has been proposed, I believe, since the 1940s. There have been a lot of different planning studies, and here we are. There have

been a lot of different planning studies, and this -- the fact that we are here tonight owes a huge amount to the grass roots advocates who have kept this project alive, who carried it, who insisted the state make it a commitment and stick to that commitment; and we really, all of us, owe a debt of gratitude to all the people who've given a lot of nights like this one to keep this project going. And because of their work, this project is now a legal commitment of the Commonwealth of Massachusetts. We are required to extend Green Line service from Lechmere to Medford Hillside in Medford and Union Square in Somerville by the final day of 2014.

I'm not going to bore you with the details, but that legal commitment is actually embedded in the Clean Air Act. We are required to do it as part of the large-scale mitigation for the Central Artery Project. So a lot of what underlies the Green Line Project depends on the air quality benefits that we project the project to provide; and we have been working, as I said, on this current phase since October of 2006.

Okay. This is the hardest slide, and I'm not going to spend a lot of time on it, but I'm sure a lot of people in the audience have questions. People have talked to me about this. How is the MBTA going to afford this? How is the Commonwealth going to afford both build it and

then to operate it? There's stuff in the newspaper every day about the state of the Commonwealth's finances, about the state of transportation financing. That's something I live with and work with all the time. That's something I know people are worried about. So I just wanted to talk very, very quickly about this just to kind of leave you with a couple of ideas that might be helpful when you're thinking about this project and thinking about your comments.

First of all, there are sort of two major types of funding -- and I'm really simplifying this -- but there are two major types of funding that the MBTA needs to run its system. The first is capital funds or construction funds, which allow them to build new things, and that's what we will be looking for to fund the Green Line Extension, the actual construction of it; and then there's sort of day-to-day operating money -- what does it take to turn on the lights, to pay the drivers, to keep the vehicles fueled, those kinds of things.

When people talk about the big gap in MBTA finances, they tend to be talking more about the everyday operating, but it really affects both things. And as a result, it affects what we do on the Green Line Extension because every time we need to make a decision about how big the project is going to be, where is it going to go, is it

going to have this feature or that feature, we're always having to think about those funding constraints, both on the construction side today and in the next couple of years, and on the long-term operating side, because we are bequeathing this project to the Commonwealth, and it will then have to run as part of the T System. So that really does affect us, and I know that we all wish it didn't but it does, and it's something that we think about all the time.

People may have heard of the D'Alessandro Report which came out in the last few weeks, kind of another itemization of the T's -- another detailed itemization of the T's funding issues. The bottom line for our purposes is that funding is very precious right now for transportation. We need to be very careful with it, and we need to think every time there might be an amenity or sort of an extra that people would like to add onto a project, we may not necessarily be able to do it.

The Governor has said very clearly he is committed to this project. That's very important. It puts us in a very special place, and we're trying to hold onto that; but please be aware of the financial considerations when you're thinking about your comments. And this is actually sort of a new issue that has changed since I was here in March, the last time we really talked about this

project together. Some of this stuff is new and is affecting how we think about things differently.

So why are we doing this? Why are we extending the Green Line? There are a lot of reasons, and probably a lot of people in this room have different reasons; but there are a bunch that we tend to think about a lot. The first, very basic, Somerville and Medford are communities that we call transit-friendly. These are places that have a lot of characteristics that make them really ripe for very good public transit. They're very dense, high populations, a lot of people don't own automobiles. There are a lot of reasons why people want to go into the core of Boston. All of these things make this a good place for better transit than what you have now.

I talked about the air quality. That's part of the legal commitment. We're clearly looking to reduce the existing traffic congestion that the Mayor had to deal with this evening. We all know the traffic's really bad here. We're also looking at providing new opportunities for economic development. We've seen that all over the Commonwealth when we've put in new transportation infrastructure, and we really believe it can happen here now; and we are projecting currently 52,000 new boardings, which is new boardings and alightings, people getting on and off at the new Green Line stations after it opens. Is

that for 2030? That's what we'd be looking to see in 2030. So those things all together make this a very strong project, and makes it certainly one of our top transportation priorities right now. Another train --

Okay. So what are we looking to propose to do? Oh, that's really hard to see, isn't it? All right. If everybody looks at their Fact Sheet, there's a map of the project in the Fact Sheet. We are proposing roughly a four-mile extension of the Green Line northwest from a relocated Lechmere station. I assume most people know that Lechmere needs to be relocated. I'll talk about that a little bit more in a second.

We're looking at six new stations in Somerville and Medford, and we'll be making use of the existing Lowell and Fitchburg commuter rail rights of way. That's a really important point for this project that I want people to remember. We are using existing rail rights of way, which means we are having extremely limited impact on the residential and business neighborhoods which is really important. It's one of the things that makes this is a really, really good project and really great for the communities around it.

So we are doing the Main Line branch, which we are currently proposing to College Avenue in Medford, and then a secondary branch -- not secondary but a smaller

branch to Union Square in Somerville. Doing this project meets the legal air quality requirements that we are committed to. The station locations that are proposed here are unchanged from what we've been proposing for a long time. If you've come to any of our meetings in the past, you'll have seen these proposals. They've been well vetted in the public. We feel comfortable with them now.

We're certainly eager to hear from people on specific details but, taken generally, we are imagining these stations as what we call neighborhood stations. They're embedded in neighborhoods. They're not big, sort of Alewife-style stations that are outside of residential fabric. We want them to be places that people can walk to, that people can bicycle to, that fit in nicely, and that means both in terms of how they relate in space to the neighborhoods around them, but also in design and architecture. We're looking to do what we can to tailor these stations to fit the neighborhoods that they're in.

Following on something the Mayor said, we have proposed for some of the stations limited short-term automobile drop-off and pickup. This is sometimes called "kiss and ride," which is sort of a weird, cute term. We know there are concerns about this, and I would say that the reason we have proposed it is because our sense of how communities work is that, even if you don't provide a place

for people to do drop-off, they will do it anyway. Two stations that I use a lot are Harvard Square and Central, both in Cambridge, both as dense as you can imagine, and people are still doing automobile drop-off and pickup, just because that's what people do. They take people to the subway when they have luggage, when they've got little babies; and if you don't provide some safe place for people to do it, even for a few minutes, you can create safety issues. So we're going to be working with the City to try to find a way to make that palatable, but for now we're thinking that's a good idea.

Also, on the bus issue, we fully agree that these stations need to be well integrated with the bus network. We are proposing, for now, to retain the existing bus system. We've heard from a lot of people that a lot of the existing bus routes are very important to them. We don't want to change those until we have a better sense of how the Green Line Extension works in these neighborhoods. Over time, as the Green Line settles in, as people start to use it, as travel patterns become clear, we may look to modify the bus network; but for now, we're trying to align the stations as well as possible with existing bus stops, and we will continue to do that as we go forward.

The other piece I wanted to talk about -- a piece that I'm sure a lot of people are interested in tonight --

is the proposed extension from College Avenue then onto Route 16, Mystic Valley Parkway, which is close to the U-Haul place, if anybody's ever had to move and rented their own U-Haul. We have proposed that we believe that the best version of the Green Line Extension goes all the way to Route 16. At the moment, we cannot afford to do that final piece. So what we are proposing is that by 2014, by our legal deadline, we will meet the legal requirement, and we will bring the Green Line to Medford Hillside. We have, for the moment, slated funding for the 2016 to 2020 timeframe to do that remaining piece.

So we are still thinking about this as a complete project, but we are having to think about it in phases because of financial reasons. And some people have asked me, "All right, I'm looking at this document that talks about everything all the way to Route 16, but I don't know if you're going to do it in the short-term. How do I comment on it, how do I think about it?" I would suggest that you comment on the whole thing because the whole thing is being presented here. We've evaluated impacts for the whole thing, but again, we'll be coming back in phases to talk about big pieces of the project. So there'll be other opportunities, but I'd encourage you to think about it now as well.

Okay. The Community Path the Mayor mentioned,

this is a very important part of the project. It is a multi-use path that is projected to run alongside the Green Line between Cedar Street -- is that right -- Cedar Street, potentially beyond into the North Point area, and then hopefully eventually feeding into the Charles River Basin, some of the existing paths that would bring people into Boston. We have committed to perform up through final design for the Community Path between Cedars and North Point. We think this is really important. At the moment, we're not able to assume financial responsibility for the construction phase, but we also agree that it would be optimal to have it done in conjunction with the Green Line Extension, and we're looking to work with the City. We're really eager to keep working on this together to figure out how we can do it because we also feel like it's a really important thing.

Okay. So as the Mayor mentioned, part of the Green Line Extension Project is the construction of a maintenance facility -- maintenance and storage for the Green Line vehicles that will serve the north side of the system. We need to build this facility somewhere as part of this extension project. The existing maintenance capacity for the Green Line is not sufficient to handle the new load that will be brought by the extension. In addition, the facilities are not located in the right

place. To not have a maintenance facility or to not have it correctly located will hamper the service. It will make it inefficient. It will introduce some of the problems that people may have experienced elsewhere on the Green Line, and we're really hoping to eliminate as much as possible.

So let me just walk people quickly through where we are on this. The DEIR talks about it in depth, which I'm sure we'll be hearing about tonight. But just a sort of quick overview, we are proposing a location known as Yard 8. That's a traditional railroad site. It's in the Inner Belt neighborhood of Somerville. That is the analysis that you will see in the document. We've talked about that in depth in the past. We understand that there's a lot of concern about that location within Somerville for a number of different reasons, and we are sensitive to that, and we are continuing to try to work to find some other solution that meets everybody's needs.

So in service of that, we are proposing, and we are already undertaking, additional analysis, both of the so-called Mirror H site, which straddles Cambridge and Somerville. It makes use of part of the NorthPoint area of Cambridge, if people are familiar of that, and several parcels in Somerville. That's a location that's been proposed by Somerville. We know there's a lot of interest

in it. We've done some analysis, we'll be doing some more.

We are also looking at a new site which is what we are calling Option L, which is here, which is a site we haven't considered in the past. We are beginning the analysis of it now. We hope to have that ready for vetting in the public hopefully next month. It has some advantages. It is close to BET, the existing Boston Engine Terminal, which we know is an interest. It doesn't block the middle of Inner Belt the way we've talked about in the past. It does have some additional costs, additional other issues, property acquisition issues, that we're trying to figure out.

So the bottom line is that we are still working on this. The analysis that you see here is for Yard 8. So if you want to comment, please comment on Yard 8. That is what is before the Environmental Agency right now, but we're going to continue to work with it, and we're going to be back out in the public probably before Christmas to talk about this more.

Okay. Very quickly, numbers are not my thing, but I know people are interested in the cost of this project. So we wanted to put them up here. They're also actually in the Fact Sheet, if people want to look at them there. You don't need to write them down. But we tend to think about our costs in two ways. We did our initial

analysis in 2008. So we have them in 2008 dollars, and that's about $804,000,000, and then we also have to do analysis in what's called "year of expenditure." When you build a project like this, you don't spend everything all at once obviously. You have a cash flow over a certain number of years, and this is a way of sort of representing that idea. It's higher because we're spending into the future, and money gets more expensive as you go forward.

Keep in mind, please, these numbers represent the extension project without the Mystic Valley Parkway/Route 16 addition that we talked about; and we have here both capital and operating. Question, how are we going to pay for all this? We're hoping to receive federal funding to help us with the construction costs. We would be hoping for about fifty percent federal funding. We are in the process of applying for that money now. That is a long and complex process, and we will be competing against transit projects all over the country. So we believe this is a good project, a competitive project. We think it meets a lot of the needs that the federal government is looking for when it looks to fund transit project, but you never know. So we need to keep working as hard as we can, and we'll also be looking for your support as part of that application to help make this strong against all of the other projects going on.

So project impacts -- project impacts are sort of the heart of what's in a DEIR. That's really why you do it, to try to identify how is a project going to change the physical environment in which it's being introduced, and we really think about impacts in two ways. There's the natural environment, which is things like air, water, other things that sort of -- plants, those kinds of things. We then look a lot at the human environment, which means historic resources, noise, vibration, automobile traffic, all of the different ways in which a big infrastructure project will influence the communities in which it's going into.

The important point to make here, the Green Line Project is a very low-impact project. You can never do any big project, particularly in an urban community that's dense like this one, without having some kind of impact; but relatively speaking, this one is really low, and one of the reasons for that is because we're making use of the railroad corridors that I talked about earlier.

So just a couple of points, we've identified here the number of buildings and intersections that are impacted on noise, vibration, and traffic metrics. These may seem like big numbers but, keeping in mind that we're dealing with thousands of structures in this corridor, this is actually pretty low on the property side, which we know is

of a lot of interest to people. The really big point is that we have zero private houses displaced. That's a huge thing. We've worked hard to do that, and we're really proud of it. Thank you.

[Applause]

MS. KATHERINE FICHTER: The acquisitions that we are talking about are primarily small ones. When we're dealing with residential, there's slices of backyards. We know that's obviously really important to people, and we're going to be dealing with it very sensitively; but we're really proud of the fact that we don't have to touch anyone's home. That's a huge thing. We are looking to take some commercial buildings. As we get farther along into the process, we'll approach owners about how we do that. There's a process of appraising the properties and, if you're a business, you're actually eligible for relocation. It's an involved process, and we're not there yet; but we actually have some information on our website about how this will happen, and we'll be continuing to work with the communities and the homeowners as we go forward.

My last two slides are on what are our sort of proposed mitigation. Keeping in mind that this is early, but we feel pretty comfortable with the ideas that we're putting out there; and as we move forward, we'll be looking to work more closely with neighborhoods, sort of micro-

neighborhoods, and then with residents and business as well. On the noise side, we'd be looking at things like noise walls and barriers, the kind of things that you sometimes see along highways, although we'd be looking for designs that are much more sensitive than what you usually see on highways.

In places where sound walls may not be appropriate or may not be effective, we'll be looking to do actual insulation in structures, new windows, other kinds of insulation. We can also do things actually with the rail and the tracks. We can lubricate them to cut down on sounds, squeaking, and we can use continuously welded track, which also sort of stops the like tha-tha-tha-tha-tha-tha sound that you often hear with the trains.

Vibration, which is a corollary to noise, there are things we can do at the track level. We can put ballast mats under track which absorb some of the vibration, and we can also do special things with the track to try to reduce it. Keeping in mind this is light rail, Green Line, it's a trolley. It's not like commuter rail. It's not like Amtrak. It's not heavy like that. It does still make sound and cause vibration, but it's less than what you would get with a traditional railroad. There is a lot more information on this in the DEIR as well, and we'll have more information to come.

Similarly, on traffic, we have proposals for the intersections where we do expect to have some effect. We'll be looking to make pedestrian improvements. We'll be looking to do roadway and signal improvements. Some of these may, in some cases, improve existing conditions. Obviously, for Lechmere, which is sort of a special circumstance, we're going to be looking to do some significant roadwork that was proposed as part of the NorthPoint project; and we'll be working with the communities to actually look at parking enforcement. We know this is of particular interest in Medford, and we'll be working on that as we go forward.

And I think, just one point to make about mitigation, mitigation can become a very emotional issue, as I think probably people know, and it's appropriate. We're looking to put something big in a neighborhood, and it's going to change things; and people get worried, and I completely understand that. And we'll be looking to work really individually with people to come up with a portfolio of mitigation that works. We don't want to put in things that don't work. Sometimes people ask for things because they've heard about them or they think they're going to be good, and they won't necessarily. So we're going to work with you to figure out the things that really are effective and then to get those implemented.

So I'm going to close in a second. This photo is from the D Line, the Riverside Branch. Our stations are not going to look like this; but a colleague of mine took this picture, and I thought it was really beautiful, so I wanted to use it.

Just quickly on next steps, what happens now? We have tonight, everybody submits their comments either tonight in speaking or they'll do them in writing in the next month or so. The Massachusetts Environmental Policy Act Office will sort of give us guidance on where do we go from here, do we need to do more work, how do we answer all the questions and comments. We will go through that process in the winter and the spring if we need to.

We're simultaneously looking to move into the next big phase of this project which is called Preliminary Engineering, which will move us beyond the ten percent design level that we're at now into something closer to thirty percent. We'll be doing a lot of work out here. We already have people doing survey work. We're going to be doing geotechnical work. You may see people in the right of way doing that. We will be out a lot more doing public involvement. It will probably change somewhat from what we've done once we sort of have basic consensus on a broad design of the project.

We're going to be working closely on things like

station design, how do the stations work with bicycle connections, road connections, pedestrian connections. We're really going to be working with people on those particular issues. So please don't get sick of us because we're going to be back. Please keep participating. Please do comments, and I will be quiet and let Nancy take over, and thank you.

MS. NANCY FARRELL: Okay. In case you just came in, I just want to remind everyone that there is a sign-up list to speak and that all speakers will get two minutes. We already have about two and half hours worth of speakers. So that is why I will cut people off at two minutes. We do want to hear what you have to say, but you can supplement your oral comments with written comments. We will begin with the first group of speakers, Lauren DiLorenzo from Medford, Leo Sacco from Medford, and Frank Gilberti. And please, when you come to the microphone, please tell us your name and address.

MS. LAUREN DILORENZO: Lauren DiLorenzo, I'm the Director of the Office of Community Development for the City of Medford. The comments that I make tonight will be brief, and they will be focused on the City of Medford, though I think some of the issues may also relate to Somerville. The purpose of this meeting really is for us to express comments, and the task before city

administrators and interested individuals is really to read the Draft Environmental Impact Report and to offer comments about whether we feel the information is sufficient to analyze the project and its environmental impact, and also to look at the mitigation that's being proposed and identify whether it's sufficient or not; and that ultimate task will go to the MEPA Office to make that determination.

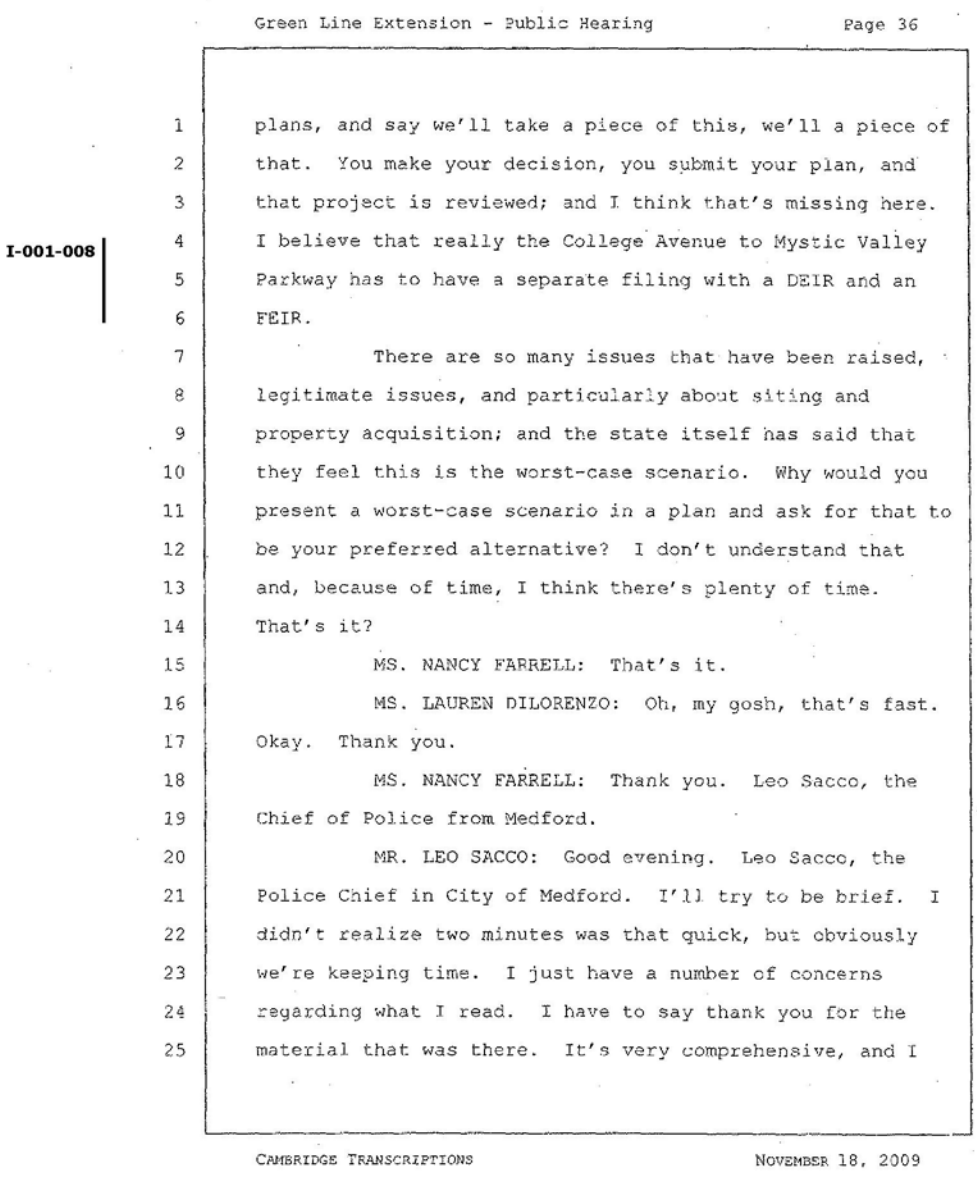
But is the intent of the state agency, MassDOT now, to have this draft filed and considered a final document; and this is not really about support of the project or not support of the project, but it's really about review of some technical information. And there is a lot of valuable information that's been prepared, but there is a lot of information that's missing also. The comments that I submit -- I won't detail every item. You're probably saying thank you. But the ultimate determination that I have made is that the DEIR is inadequate, and that a final Environmental Impact Report should be prepared.

I-001-007

The other issue that's of real concern to me is, and I think a lot of people will say when they get up in their comments about information that is missing and particularly about the terminus at Mystic Valley Parkway. The state is actually asking for two things. Now, when somebody comes in to build a project in the City of Medford or anywhere, you don't submit a filing on two sets of

I-001-007

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.



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I-001-008

plans, and say we'll take a piece of this, we'll a piece of that. You make your decision, you submit your plan, and that project is reviewed; and I think that's missing here. I believe that really the College Avenue to Mystic Valley Parkway has to have a separate filing with a DEIR and an FEIR.

There are so many issues that have been raised, legitimate issues, and particularly about siting and property acquisition; and the state itself has said that they feel this is the worst-case scenario. Why would you present a worst-case scenario in a plan and ask for that to be your preferred alternative? I don't understand that and, because of time, I think there's plenty of time. That's it?

MS. NANCY FARRELL: That's it.

MS. LAUREN DILORENZO: Oh, my gosh, that's fast. Okay. Thank you.

MS. NANCY FARRELL: Thank you. Leo Sacco, the Chief of Police from Medford.

MR. LEO SACCO: Good evening. Leo Sacco, the Police Chief in City of Medford. I'll try to be brief. I didn't realize two minutes was that quick, but obviously we're keeping time. I just have a number of concerns regarding what I read. I have to say thank you for the material that was there. It's very comprehensive, and I

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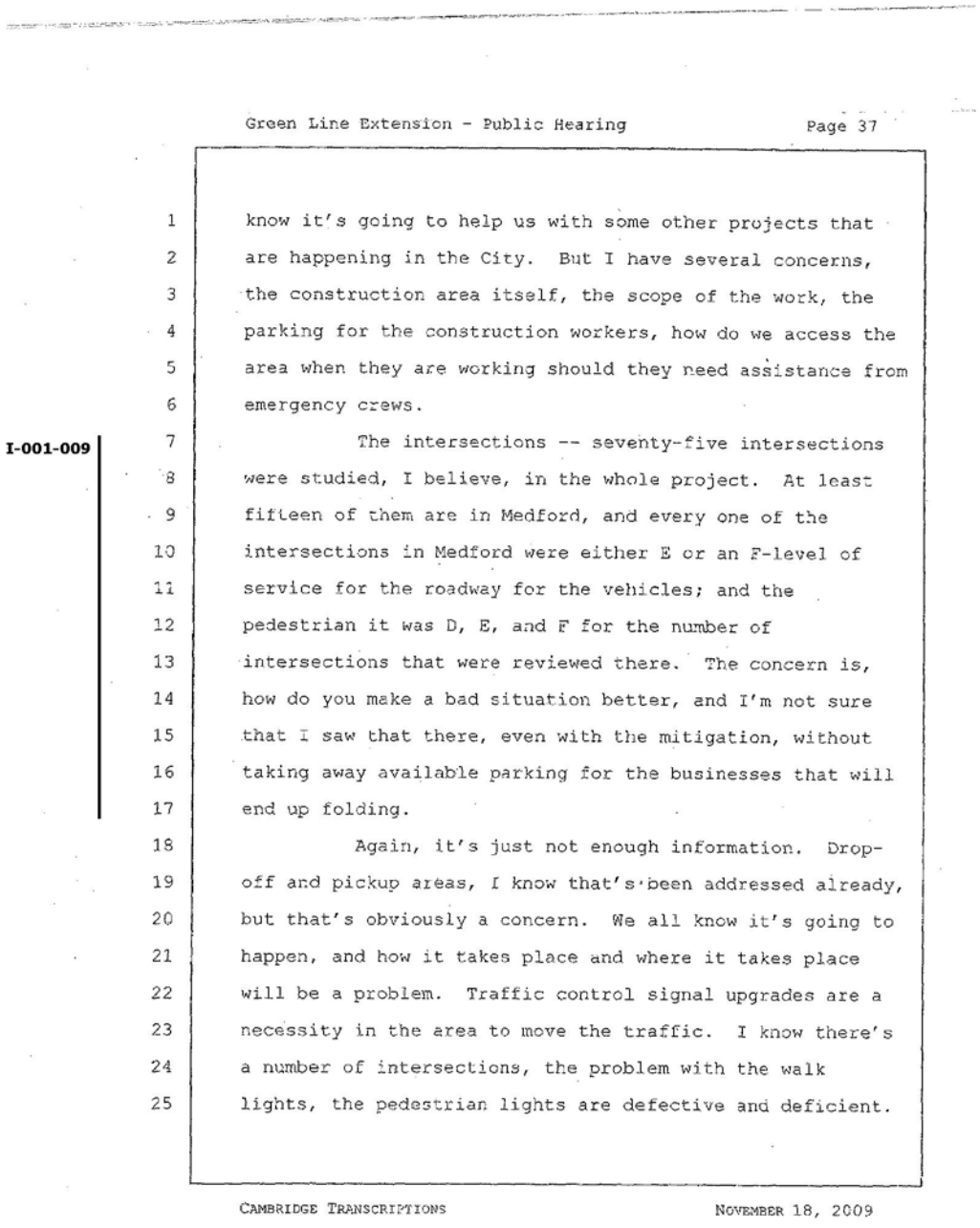
I-001-008

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



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know it's going to help us with some other projects that are happening in the City. But I have several concerns, the construction area itself, the scope of the work, the parking for the construction workers, how do we access the area when they are working should they need assistance from emergency crews.

I-001-009

The intersections -- seventy-five intersections were studied, I believe, in the whole project. At least fifteen of them are in Medford, and every one of the intersections in Medford were either E or an F-level of service for the roadway for the vehicles; and the pedestrian it was D, E, and F for the number of intersections that were reviewed there. The concern is, how do you make a bad situation better, and I'm not sure that I saw that there, even with the mitigation, without taking away available parking for the businesses that will end up folding.

Again, it's just not enough information. Drop-off and pickup areas, I know that's been addressed already, but that's obviously a concern. We all know it's going to happen, and how it takes place and where it takes place will be a problem. Traffic control signal upgrades are a necessity in the area to move the traffic. I know there's a number of intersections, the problem with the walk lights, the pedestrian lights are defective and deficient.

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I-001-009

As described in Section 5.5 of the DEIR/EA, there are number of intersections that are projected to decline in levels of service by 2030 both with and without the Green Line Extension Project. The decline in traffic operations is mostly due to existing congestion levels, additional traffic expected in the region unrelated to the proposed project, and recent changes to the Americans with Disabilities Act (and associated state regulations), which requires that pedestrian phases at traffic signals be timed for a slower walking speed.

As stated by the Secretary of Environmental Affairs in his December 2006 Certificate on the EENF, the purpose of the DEIR analysis "is not to hold EOT (now MassDOT) responsible for mitigating longstanding congestion problems but, rather, to identify the specific impacts and benefits of this project." In this spirit, MassDOT has made several suggestions for traffic mitigation at locations where the proposed project contributes to a decline in overall intersection level of service. The proposed mitigation is sufficient to mitigate project impacts, but in most cases not sufficient to provide superior levels of service where they do not exist today.

The traffic control lights themselves are deficient in the level of flow.

Again, in the spirit of keeping it brief and allowing other people to speak, those are my concerns. I have to say, as the Chief, I'm very happy that traffic and parking is the number one issue in the City of Medford, that it isn't violent crime, but it's serious enough that it gets the attention of every person in the City. Thank you.

MS. NANCY FARRELL: Thank you, sir. Frank Gilberti, the Fire Chief in Medford, and next will be Karen Rose, the Director of Public Health in Medford.

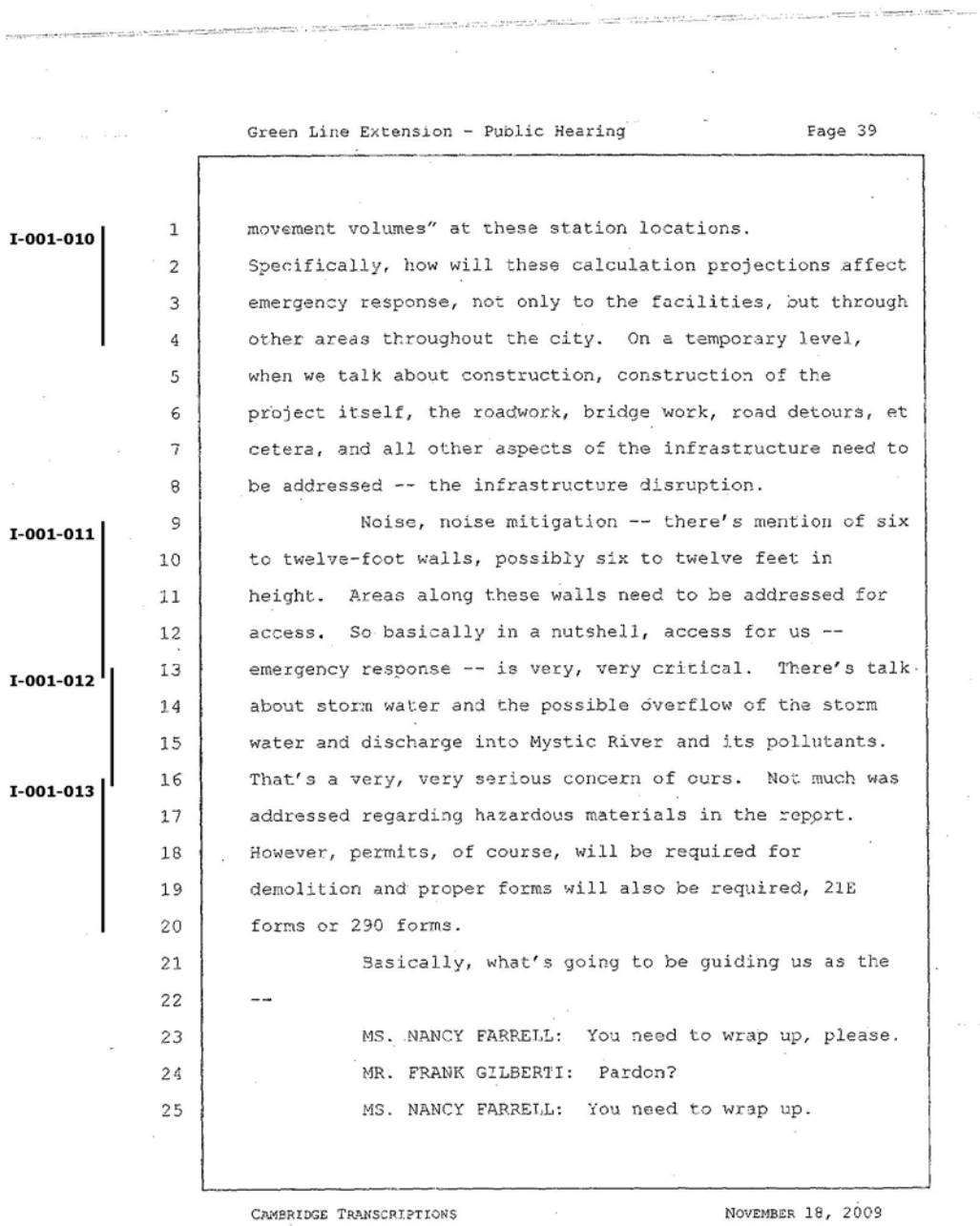
MR. FRANK GILBERTI: Good evening, thank you. My name is Frank Gilberti, Chief of the Fire Department in Medford, and some of my comments may be redundant, as Chief Sacco touched on. But I'll be talking about a few of the issues affecting emergency response regarding the Green Line. Land use alternatives, depending upon the plan chosen, may require demolition of up to ten structures in Medford, and they speak of track relocation. Steep walls, as the report implies, may be necessary, and emergency access point along the entire route of the tracks is a very, very serious concern of mine.

I-001-010

Regarding the traffic, considerable thought must be given as to what is referred to as "peak hour turning

I-001-010

Detailed traffic design plans will be developed during preliminary engineering. MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during and beyond the construction phase.



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movement volumes" at these station locations. Specifically, how will these calculation projections affect emergency response, not only to the facilities, but through other areas throughout the city. On a temporary level, when we talk about construction, construction of the project itself, the roadwork, bridge work, road detours, et cetera, and all other aspects of the infrastructure need to be addressed -- the infrastructure disruption.

Noise, noise mitigation -- there's mention of six to twelve-foot walls, possibly six to twelve feet in height. Areas along these walls need to be addressed for access. So basically in a nutshell, access for us -- emergency response -- is very, very critical. There's talk about storm water and the possible overflow of the storm water and discharge into Mystic River and its pollutants. That's a very, very serious concern of ours. Not much was addressed regarding hazardous materials in the report. However, permits, of course, will be required for demolition and proper forms will also be required, 21E forms or 290 forms.

Basically, what's going to be guiding us as the --

MS. NANCY FARRELL: You need to wrap up, please.

MR. FRANK GILBERTI: Pardon?

MS. NANCY FARRELL: You need to wrap up.

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I-001-011

MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during and beyond the construction phase.

I-001-012

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

I-001-013

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

MR. GILBERTI: Okay. Basically what's going to be guiding the Fire Department is standard NFPA standard, and I'm sure you're well aware of that fixed railway systems. Thank you. Thank you for your time.

MS. NANCY FARRELL: Thank you. Karen Rose and then Cassandra Koutalidis.

MS. KAREN ROSE: Good evening. I will try to shorten my comments. As far as the air quality, I think that in the report it talks about a slight increase in diesel particulates relating to moving the tracks. I think this should be a five-star project, as it looks like you're trying to make it. I think we should mitigate existing conditions and really make the quality of life much better, the health of people's lives much better. The Transportation Reform Act signed by Governor Patrick on June twenty-sixth of this year requires MDPH to study health effects exposure of fine and ultrafine particulate air pollution upon populations located close to sources of such pollution. This would be an ideal time to bring them in and make the benefits in the mitigation of the Green Line Extension.

I-001-014

Station design, I also agree, College Ave. in particular, with the five-point intersection, seems dangerous, especially with the entrance on the bridge side, as well as the Route 16, Mystic Valley. Also, indoor air

I-001-014

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

quality at the stations, there's a comment in there -- and I won't read it because I'll waste my time -- indoor air quality mitigation doesn't also equate to what happens to the outdoor air quality when those same odors, irritations, and harmful effects are moved outside.

Regarding noise and vibration, I think there were not enough studies done. There's on three noise meters, two vibration, and one combo unit in Medford. It's very hard for somebody like myself that needs the detail to be able to see higher incidents. Obviously, in the report it states that the 10 decibels equals a doubling of perceived loudness. We need to really take a better look at that. Obviously, using the maximum of noise barriers and insulation would be ideal. Work for demolition and construction -- a huge issue for us. Pest control, dust control, noise, all of that -- we need much more detail than what we have. It's very hard -- and I realize this is ten percent -- but it's very, very hard to deal with that.

I also, just on socioeconomic and environmental justice, have some concerns regarding elderly because of the housing project and our immigrant population, which isn't reflected. Thank you.

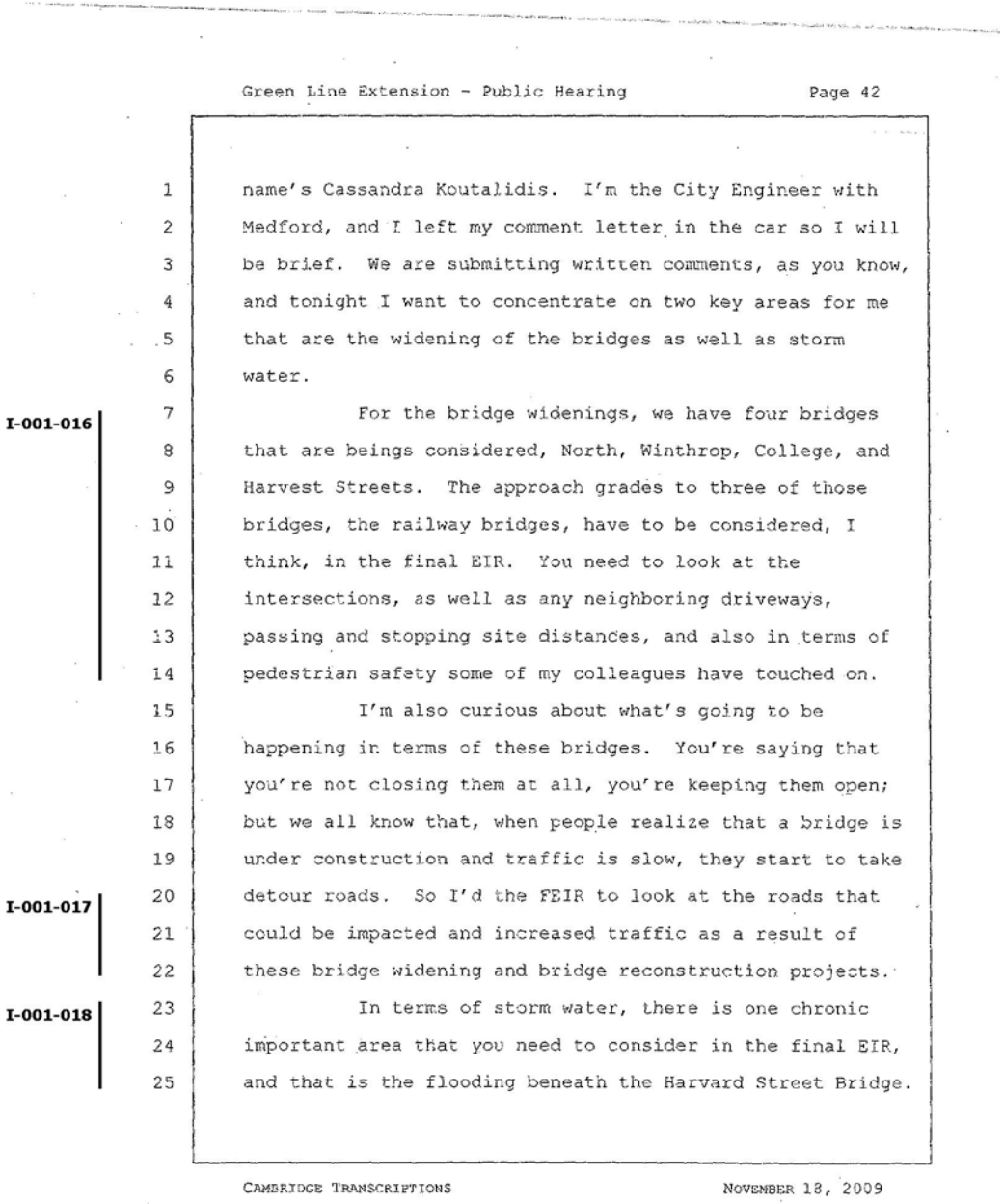
MS. NANCY FARRELL: Thank you. Cassandra and then Diane McLeod from Medford.

MS. CASSANDRA KOUTALIDIS: Good evening. My

I-001-015

I-001-015

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.



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name's Cassandra Koutalidis. I'm the City Engineer with Medford, and I left my comment letter in the car so I will be brief. We are submitting written comments, as you know, and tonight I want to concentrate on two key areas for me that are the widening of the bridges as well as storm water.

I-001-016

For the bridge widenings, we have four bridges that are beings considered, North, Winthrop, College, and Harvest Streets. The approach grades to three of those bridges, the railway bridges, have to be considered, I think, in the final EIR. You need to look at the intersections, as well as any neighboring driveways, passing and stopping site distances, and also in terms of pedestrian safety some of my colleagues have touched on.

I'm also curious about what's going to be happening in terms of these bridges. You're saying that you're not closing them at all, you're keeping them open; but we all know that, when people realize that a bridge is under construction and traffic is slow, they start to take detour roads. So I'd the FEIR to look at the roads that could be impacted and increased traffic as a result of these bridge widening and bridge reconstruction projects.

I-001-017

I-001-018

In terms of storm water, there is one chronic important area that you need to consider in the final EIR, and that is the flooding beneath the Harvard Street Bridge.

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I-001-016

MassDOT will specifically coordinate with emergency response providers to plan for appropriate site and community access during and beyond the construction phase. Detailed construction management plans will be prepared during preliminary engineering.

I-001-017

DEIR/EA Table 6-1, Project Mitigation Commitments, lists the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. MassDOT has prepared a limited scope FEIR to address specific requirements of the Secretary's Certificate on the DEIR/EA.

I-001-018

The Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

I-001-018

That will not go away, it will get worse, and I'd like the document and the studies to consider how you can capture and store and attenuate the storm water flow after the rain event has passed. There are options. If you look at adjacent properties, if you can find something in the street, I think that's a project that could be undertaken as part of the final studies.

I-001-019

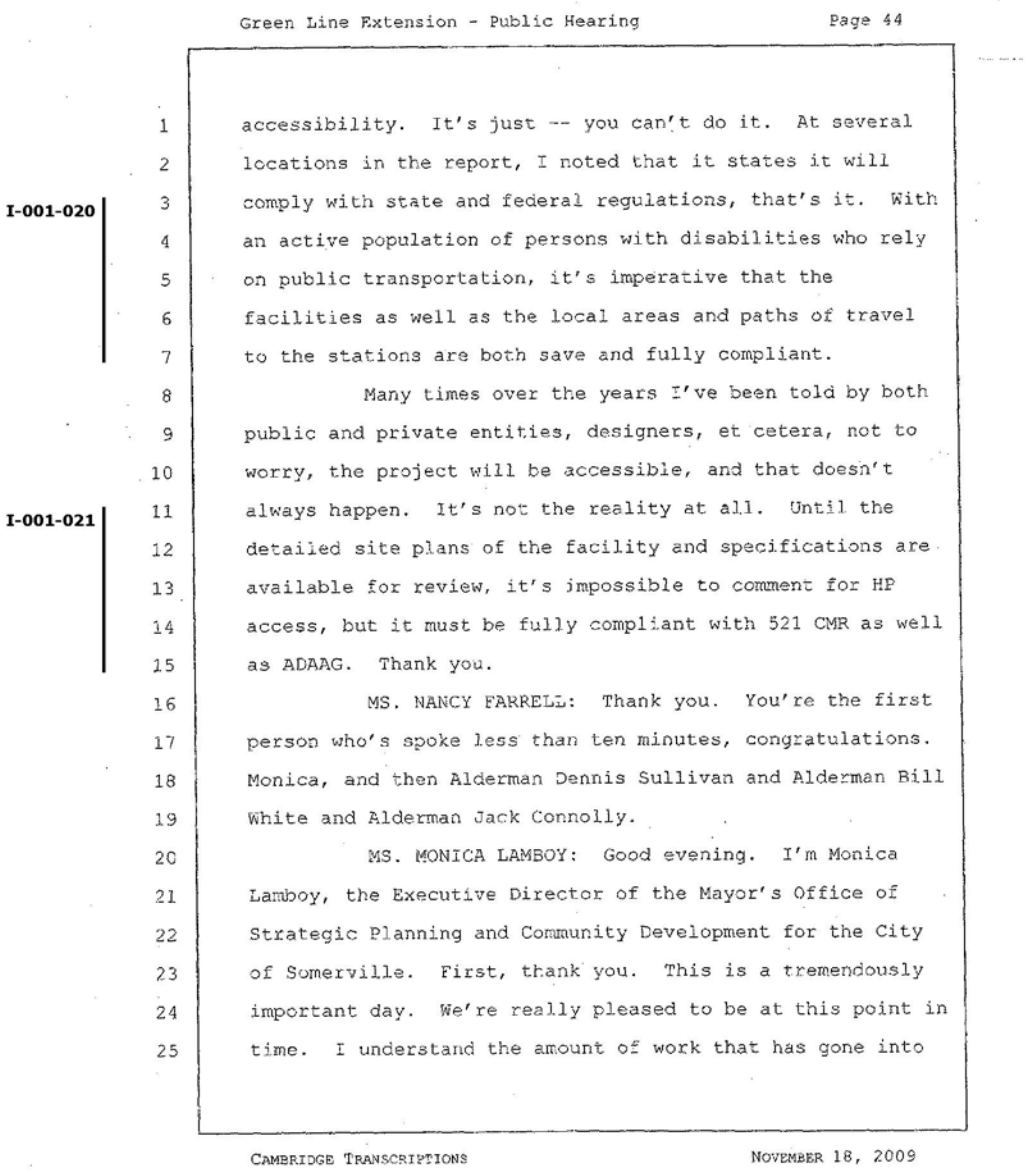
I'm also concerned about any increase in peak flows to our system, as well as maintaining our system's connections to the drain lines that are in the right of way that go out to the Mystic River currently. You're showing underdrains. You're showing potential groundwater pumping. I'd like to know if there's going to be any pumping to the city's systems and what the capacity impacts would be. On Orchard Street and in that area, we're clearly over capacity, and we need to have some consideration made for that. Thank you.

MS. NANCY FARRELL: Thank you. Diane McLeod from Medford, and then we'll have Monica Lamboy from Somerville.

MS. DIANE MCLEOD: Thank you. My name is Diane McLeod from Medford. I'm the Diversity Director for the City and, in that capacity, serve as ADA Coordinator, as well as Liaison to the Commission for Persons with Disabilities. My first concern is that, at ten percent design, it's impossible to review this document for

I-001-019

Please see response to Comment I-001-018.



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accessibility. It's just -- you can't do it. At several locations in the report, I noted that it states it will comply with state and federal regulations, that's it. With an active population of persons with disabilities who rely on public transportation, it's imperative that the facilities as well as the local areas and paths of travel to the stations are both save and fully compliant.

Many times over the years I've been told by both public and private entities, designers, et cetera, not to worry, the project will be accessible, and that doesn't always happen. It's not the reality at all. Until the detailed site plans of the facility and specifications are available for review, it's impossible to comment for HP access, but it must be fully compliant with 521 CMR as well as ADAAG. Thank you.

MS. NANCY FARRELL: Thank you. You're the first person who's spoke less than ten minutes, congratulations. Monica, and then Alderman Dennis Sullivan and Alderman Bill White and Alderman Jack Connolly.

MS. MONICA LAMBOY: Good evening. I'm Monica Lamboy, the Executive Director of the Mayor's Office of Strategic Planning and Community Development for the City of Somerville. First, thank you. This is a tremendously important day. We're really pleased to be at this point in time. I understand the amount of work that has gone into

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I-001-020

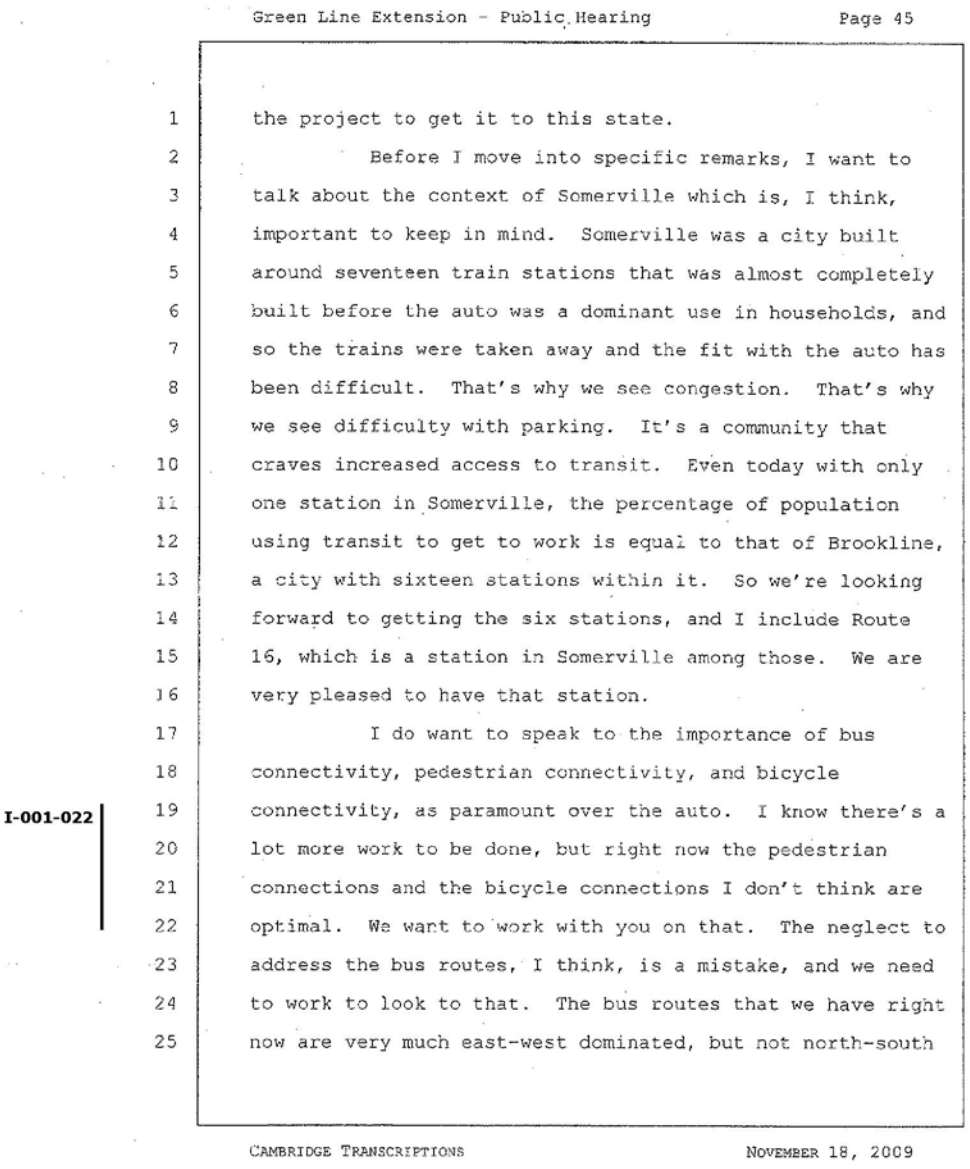
I-001-021

I-001-020

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-001-021

Please see response to Comment I-001-020.



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the project to get it to this state.

Before I move into specific remarks, I want to talk about the context of Somerville which is, I think, important to keep in mind. Somerville was a city built around seventeen train stations that was almost completely built before the auto was a dominant use in households, and so the trains were taken away and the fit with the auto has been difficult. That's why we see congestion. That's why we see difficulty with parking. It's a community that craves increased access to transit. Even today with only one station in Somerville, the percentage of population using transit to get to work is equal to that of Brookline, a city with sixteen stations within it. So we're looking forward to getting the six stations, and I include Route 16, which is a station in Somerville among those. We are very pleased to have that station.

I do want to speak to the importance of bus connectivity, pedestrian connectivity, and bicycle connectivity, as paramount over the auto. I know there's a lot more work to be done, but right now the pedestrian connections and the bicycle connections I don't think are optimal. We want to work with you on that. The neglect to address the bus routes, I think, is a mistake, and we need to work to look to that. The bus routes that we have right now are very much east-west dominated, but not north-south

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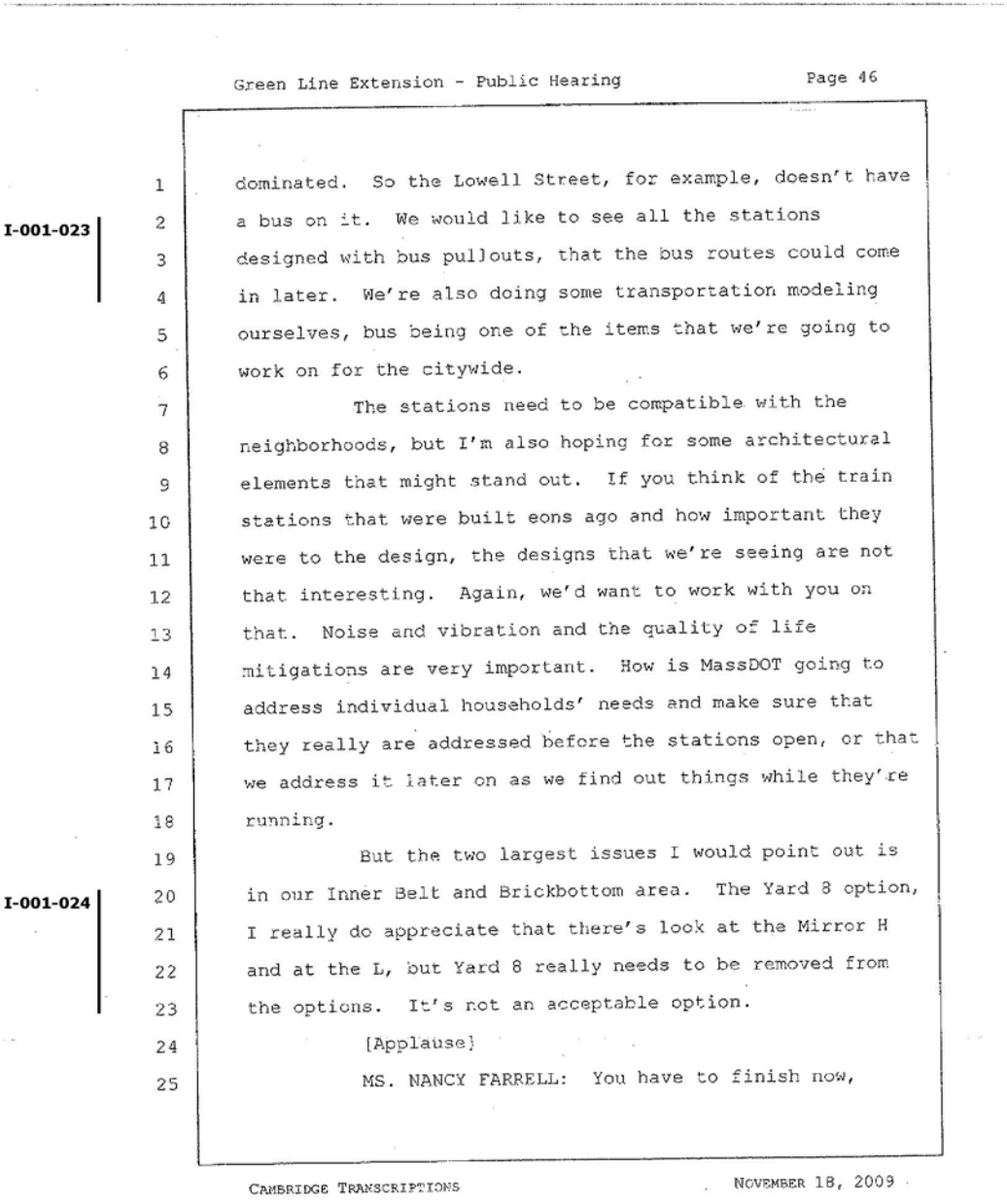
I-001-022

I-001-022

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



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dominated. So the Lowell Street, for example, doesn't have a bus on it. We would like to see all the stations designed with bus pullouts, that the bus routes could come in later. We're also doing some transportation modeling ourselves, bus being one of the items that we're going to work on for the citywide.

I-001-023

The stations need to be compatible with the neighborhoods, but I'm also hoping for some architectural elements that might stand out. If you think of the train stations that were built eons ago and how important they were to the design, the designs that we're seeing are not that interesting. Again, we'd want to work with you on that. Noise and vibration and the quality of life mitigations are very important. How is MassDOT going to address individual households' needs and make sure that they really are addressed before the stations open, or that we address it later on as we find out things while they're running.

But the two largest issues I would point out is in our Inner Belt and Brickbottom area. The Yard 8 option, I really do appreciate that there's look at the Mirror H and at the L, but Yard 8 really needs to be removed from the options. It's not an acceptable option.

I-001-024

[Applause]

MS. NANCY FARRELL: You have to finish now,

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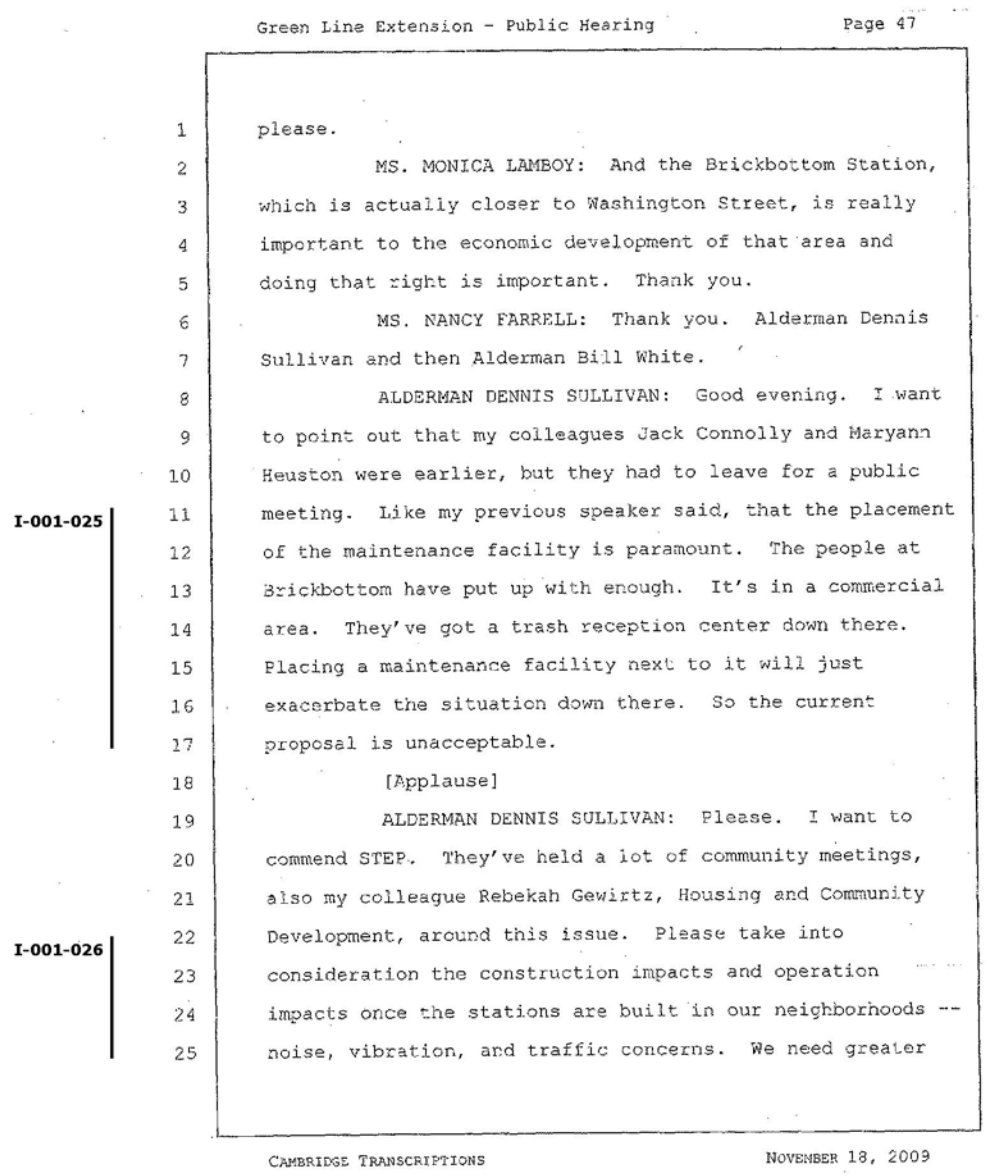
I-001-023

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-001-024

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



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please.

MS. MONICA LAMBOY: And the Brickbottom Station, which is actually closer to Washington Street, is really important to the economic development of that area and doing that right is important. Thank you.

MS. NANCY FARRELL: Thank you. Alderman Dennis Sullivan and then Alderman Bill White.

ALDERMAN DENNIS SULLIVAN: Good evening. I want to point out that my colleagues Jack Connolly and Maryann Heuston were earlier, but they had to leave for a public meeting. Like my previous speaker said, that the placement of the maintenance facility is paramount. The people at Brickbottom have put up with enough. It's in a commercial area. They've got a trash reception center down there. Placing a maintenance facility next to it will just exacerbate the situation down there. So the current proposal is unacceptable.

[Applause]

ALDERMAN DENNIS SULLIVAN: Please. I want to commend STEP. They've held a lot of community meetings, also my colleague Rebekah Gewirtz, Housing and Community Development, around this issue. Please take into consideration the construction impacts and operation impacts once the stations are built in our neighborhoods -- noise, vibration, and traffic concerns. We need greater

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I-001-025

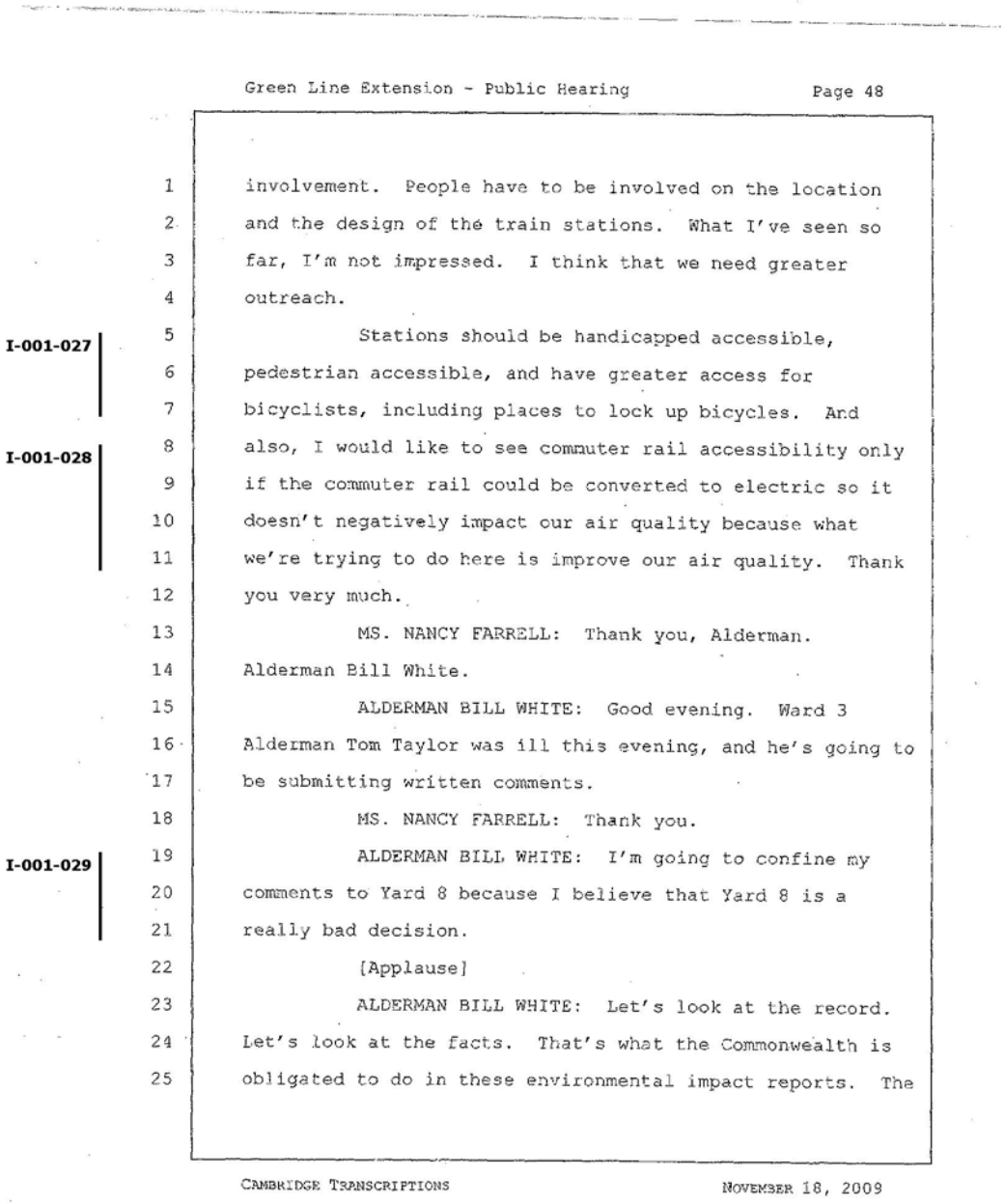
I-001-026

I-001-025

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-026

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.



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involvement. People have to be involved on the location and the design of the train stations. What I've seen so far, I'm not impressed. I think that we need greater outreach.

I-001-027 Stations should be handicapped accessible, pedestrian accessible, and have greater access for bicyclists, including places to lock up bicycles. And I-001-028 also, I would like to see commuter rail accessibility only if the commuter rail could be converted to electric so it doesn't negatively impact our air quality because what we're trying to do here is improve our air quality. Thank you very much.

MS. NANCY FARRELL: Thank you, Alderman. Alderman Bill White.

ALDERMAN BILL WHITE: Good evening. Ward 3 Alderman Tom Taylor was ill this evening, and he's going to be submitting written comments.

MS. NANCY FARRELL: Thank you.

I-001-029 ALDERMAN BILL WHITE: I'm going to confine my comments to Yard 8 because I believe that Yard 8 is a really bad decision.

[Applause]

ALDERMAN BILL WHITE: Let's look at the record. Let's look at the facts. That's what the Commonwealth is obligated to do in these environmental impact reports. The

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I-001-027

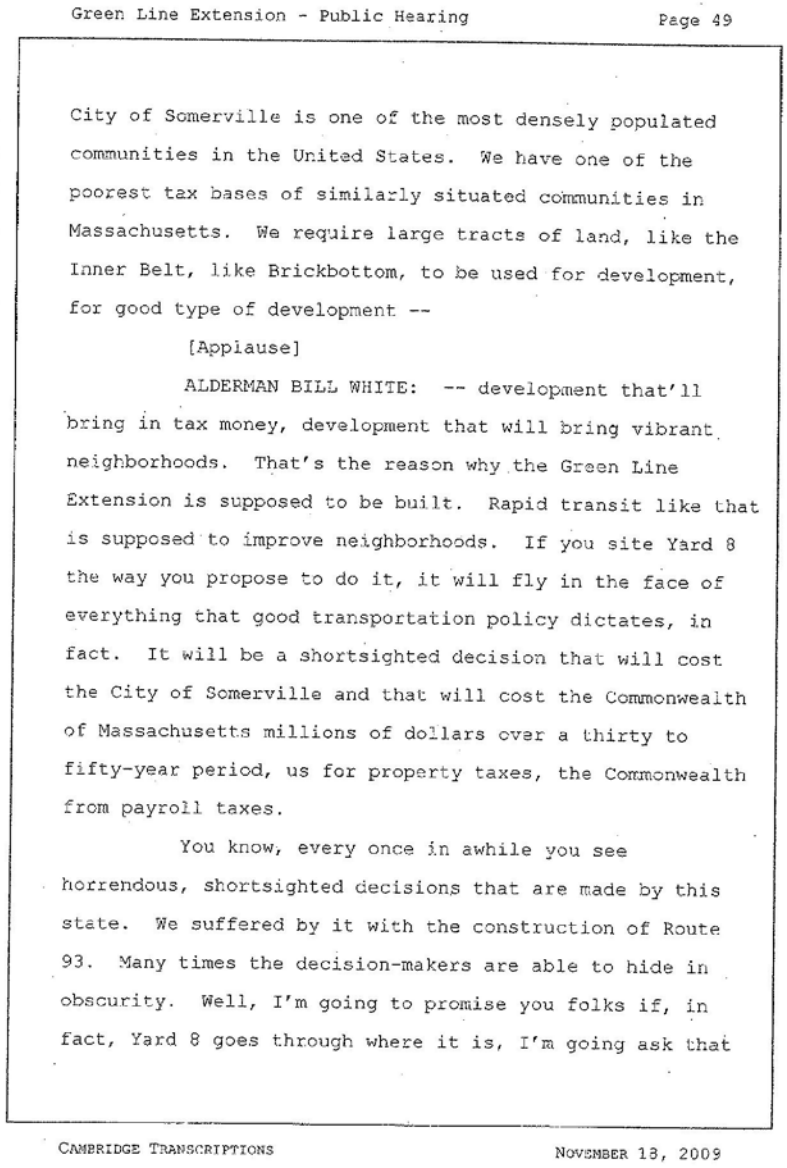
The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-028

The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA.

The conceptual future electrification of MBTA commuter rail lines in the Study Area is beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail. The Green Line



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City of Somerville is one of the most densely populated communities in the United States. We have one of the poorest tax bases of similarly situated communities in Massachusetts. We require large tracts of land, like the Inner Belt, like Brickbottom, to be used for development, for good type of development --

[Applause]

ALDERMAN BILL WHITE: -- development that'll bring in tax money, development that will bring vibrant neighborhoods. That's the reason why the Green Line Extension is supposed to be built. Rapid transit like that is supposed to improve neighborhoods. If you site Yard 8 the way you propose to do it, it will fly in the face of everything that good transportation policy dictates, in fact. It will be a shortsighted decision that will cost the City of Somerville and that will cost the Commonwealth of Massachusetts millions of dollars over a thirty to fifty-year period, us for property taxes, the Commonwealth from payroll taxes.

You know, every once in awhile you see horrendous, shortsighted decisions that are made by this state. We suffered by it with the construction of Route 93. Many times the decision-makers are able to hide in obscurity. Well, I'm going to promise you folks if, in fact, Yard 8 goes through where it is, I'm going ask that

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Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project.

I-001-029

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the Somerville Library create some library shelf space, and we're going to call it "DOT's Folly," and we're going have the information there. We're going to have the names of the decision-makers.

[Applause]

ALDERMAN BILL WHITE: So twenty-five and thirty years from now, when people are shaking their heads and saying what a horrible decision it was to site the maintenance facility at Yard 8 and how it cost the City of Somerville millions of dollars, everybody will know who's responsible for it. Your parents are here. You don't want to be responsible for that.

[Laughter]

ALDERMAN BILL WHITE: Let's not make it DOT's Folly.

MS. KATHERINE FICHTER: Thank you, Alderman.

ALDERMAN BILL WHITE: Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Alderman Rebekah Gewirtz from Somerville.

ALDERMAN REBEKAH GEWIRTZ: Well, it is hard to follow-up Bill White. He is terrific. Thank you for the opportunity to testify today. My name is Rebekah Gewirtz. I'm the Ward 6 Alderman, and I'm the Chair of the Housing

and Community Development Committee of the Board of Aldermen. My colleague Dennis Sullivan spoke. He's on that committee, as is Alderman Bill Roche, who I know was with us here earlier today.

In the capacity as Chair of Housing and Community Development, I have worked really hard to try to create a space where members of the community, STEP and others, and the administration and the Board of Aldermen, can all come together to talk about what we want to see in terms of the Green Line Extension, and make sure that we are all on the same page. Three major things have come to the forefront that I wanted to speak on today. I know have limited time.

I want to first talk about the maintenance facility. I cannot echo enough what both of my colleagues have said and what I know the Mayor said earlier and what Monica Lamboy -- to her credit, she has done a terrific job as well -- has said about the location of the maintenance facility. We understand that we have to have the maintenance facility. We don't like it, but we don't want it at Yard 8. It's going to negatively impact the residents at Brickbottom and other residents, and it's going to cut off our economic development potential at the Inner Belt. What we want to have the state look at is Option L and also Mirror Scheme H, and I cannot emphasize that enough, that we do not want Yard 8. We do not want

I-001-030

I-001-030

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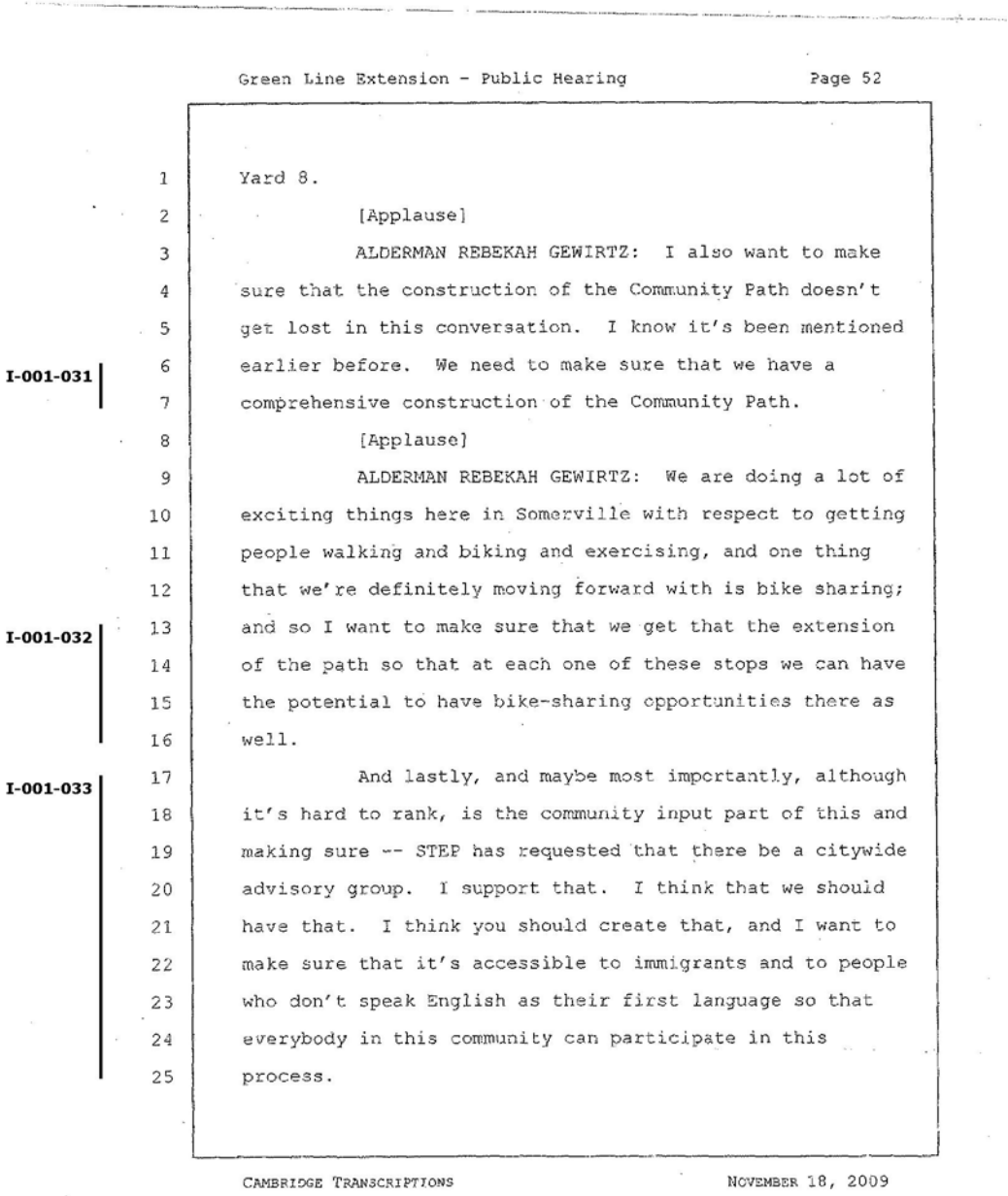

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Yard 8.

[Applause]

ALDERMAN REBEKAH GEWIRTZ: I also want to make sure that the construction of the Community Path doesn't get lost in this conversation. I know it's been mentioned earlier before. We need to make sure that we have a comprehensive construction of the Community Path.

[Applause]

ALDERMAN REBEKAH GEWIRTZ: We are doing a lot of exciting things here in Somerville with respect to getting people walking and biking and exercising, and one thing that we're definitely moving forward with is bike sharing; and so I want to make sure that we get that the extension of the path so that at each one of these stops we can have the potential to have bike-sharing opportunities there as well.

And lastly, and maybe most importantly, although it's hard to rank, is the community input part of this and making sure -- STEP has requested that there be a citywide advisory group. I support that. I think that we should have that. I think you should create that, and I want to make sure that it's accessible to immigrants and to people who don't speak English as their first language so that everybody in this community can participate in this process.

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I-001-031

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-001-032

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I-001-033

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-033

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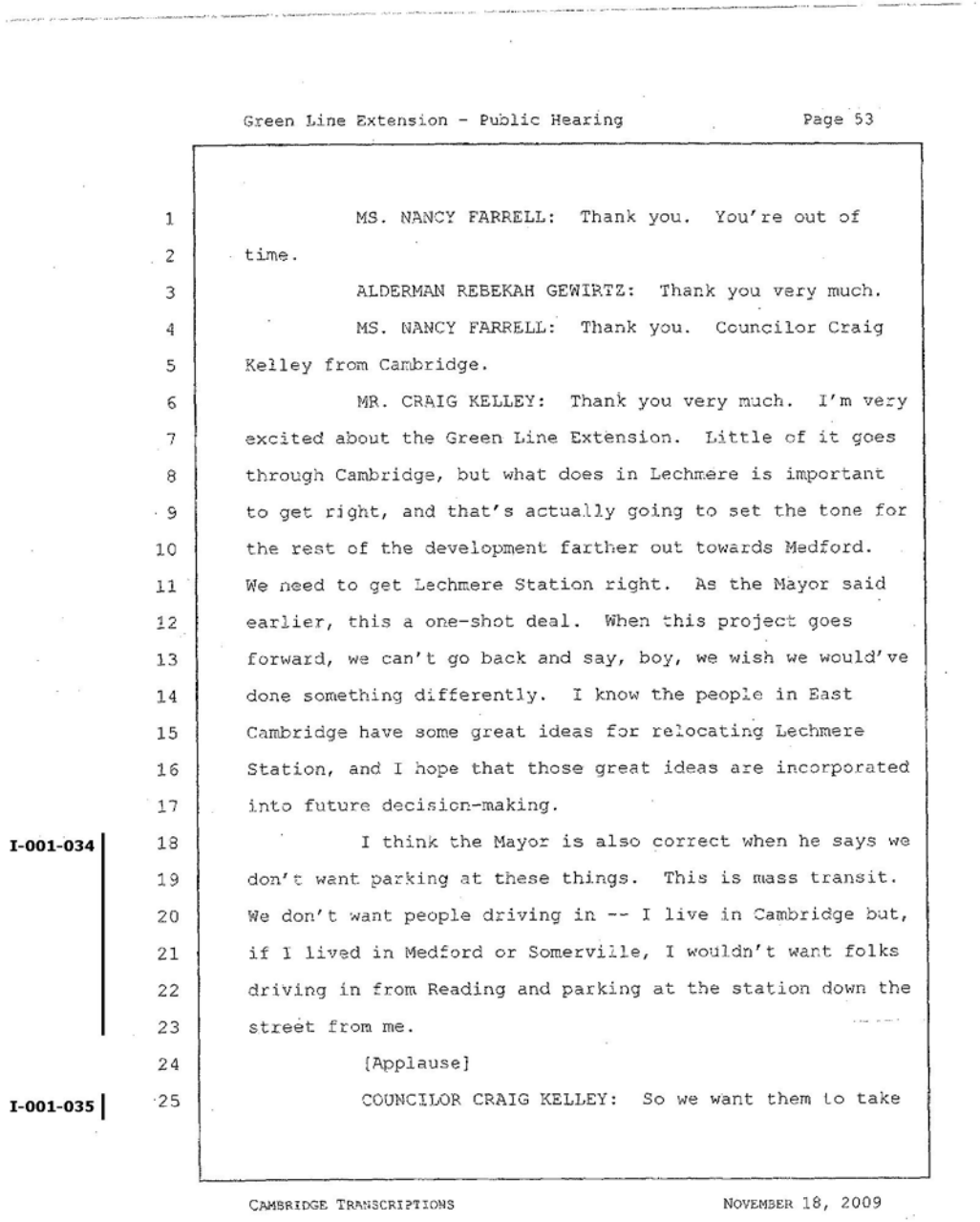

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MS. NANCY FARRELL: Thank you. You're out of time.

ALDERMAN REBEKAH GEWIRTZ: Thank you very much.

MS. NANCY FARRELL: Thank you. Councilor Craig Kelley from Cambridge.

MR. CRAIG KELLEY: Thank you very much. I'm very excited about the Green Line Extension. Little of it goes through Cambridge, but what does in Lechmere is important to get right, and that's actually going to set the tone for the rest of the development farther out towards Medford. We need to get Lechmere Station right. As the Mayor said earlier, this a one-shot deal. When this project goes forward, we can't go back and say, boy, we wish we would've done something differently. I know the people in East Cambridge have some great ideas for relocating Lechmere Station, and I hope that those great ideas are incorporated into future decision-making.

I-001-034 I think the Mayor is also correct when he says we don't want parking at these things. This is mass transit. We don't want people driving in -- I live in Cambridge but, if I lived in Medford or Somerville, I wouldn't want folks driving in from Reading and parking at the station down the street from me.

[Applause]

I-001-035 COUNCILOR CRAIG KELLEY: So we want them to take

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I-001-034

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-001-035

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-001-035

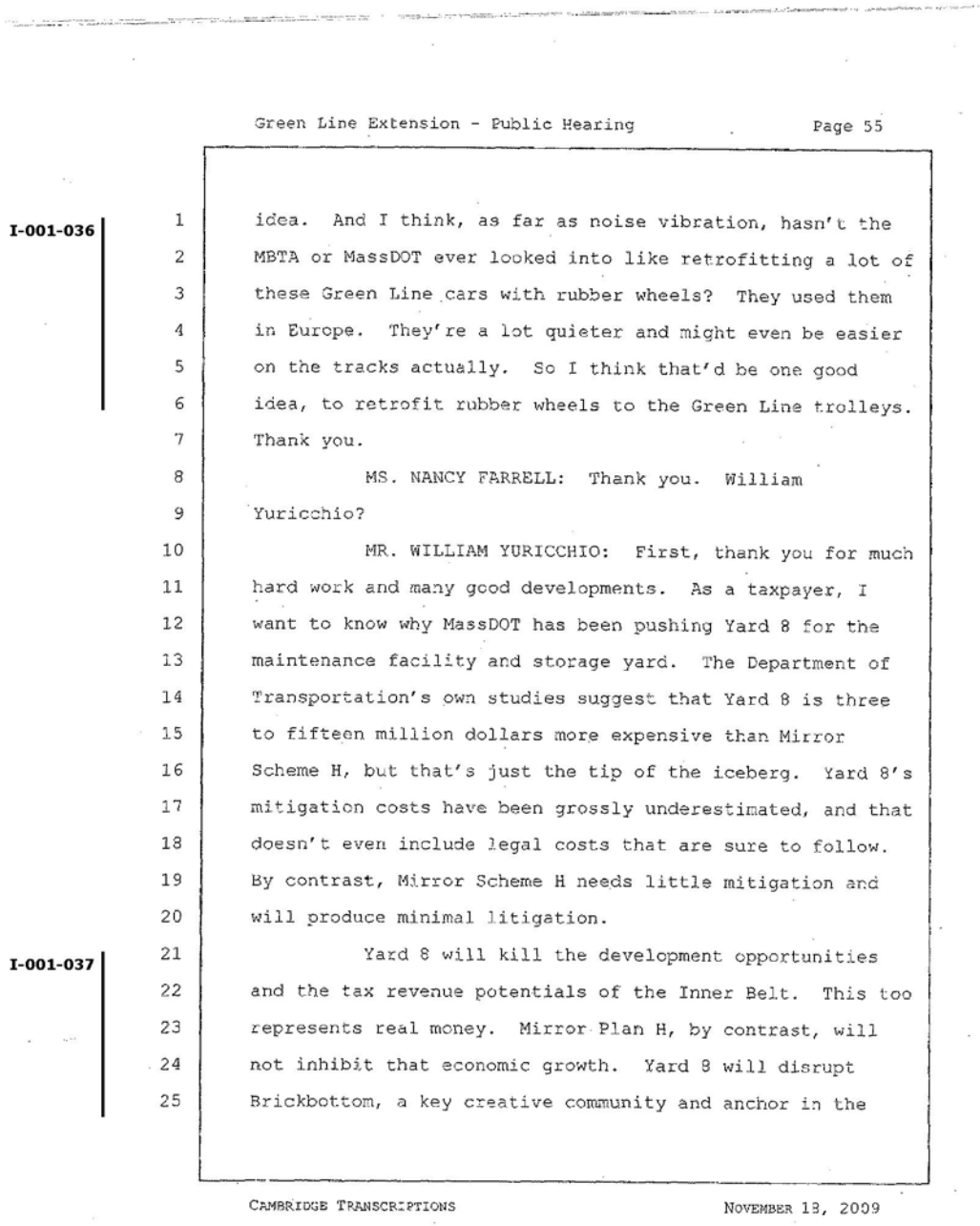
buses there. We want to make sure the bus routes are going to work. I will reiterate again, and I'm sure it'll be done again and again, this is a one-shot deal. Once it's built, it's done. Once the planning's at the thirty percent state, it's probably kind of done, too. So we need to make sure we don't get there faster than is wise, and we wind up with a good project. Thank you.

[Applause]

MS. NANCY FARRELL: Thank you. We're moving to the public comment portion. I'll take a break again later and see if there are any more elected officials. The first three public speakers are Tom Gilbert, William Yuricchio, and Robert Martel. Are you here, gentlemen? Tom Gilbert? Hey, Tom.

MR. TOM GILBERT: Hi, my name is Tom Gilbert. I'm from the Teele Square region in West Somerville. I think for the most part, I think it's really great that we're moving along here and really making this reality. At the same time, I guess I have the same concerns that a lot of the elected leaders have as far as regarding like public domain, you know, various houses would have to come down because -- you know, especially around the Route 16 area, I know that's pretty sensitive and everything.

And I guess having more studies and what's actually going to happen I think would really be a good



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I-001-036

idea. And I think, as far as noise vibration, hasn't the MBTA or MassDOT ever looked into like retrofitting a lot of these Green Line cars with rubber wheels? They used them in Europe. They're a lot quieter and might even be easier on the tracks actually. So I think that'd be one good idea, to retrofit rubber wheels to the Green Line trolleys. Thank you.

MS. NANCY FARRELL: Thank you. William Yuricchio?

MR. WILLIAM YURICCHIO: First, thank you for much hard work and many good developments. As a taxpayer, I want to know why MassDOT has been pushing Yard 8 for the maintenance facility and storage yard. The Department of Transportation's own studies suggest that Yard 8 is three to fifteen million dollars more expensive than Mirror Scheme H, but that's just the tip of the iceberg. Yard 8's mitigation costs have been grossly underestimated, and that doesn't even include legal costs that are sure to follow. By contrast, Mirror Scheme H needs little mitigation and will produce minimal litigation.

I-001-037

Yard 8 will kill the development opportunities and the tax revenue potentials of the Inner Belt. This too represents real money. Mirror Plan H, by contrast, will not inhibit that economic growth. Yard 8 will disrupt Brickbottom, a key creative community and anchor in the

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I-001-036

The Green Line Extension would be compatible with the existing MBTA Green Line network. This light rail network uses a steel wheel technology.

I-001-037

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I-001-037

redevelopment of the area. Mirror Scheme H is away from existing and proposed residences and will have minimal impact. Please think about the future. The decisions we make now will affect not just the lives of the people in this room here tonight, but they will affect generations to come; and when you add up the cost to taxpayers and the permanent loss of tax revenues from the Inner Beltway, the implications are profound. Thank you.

MS. NANCY FARRELL: Thank you. Hi.

MR. ROBERT MARTEL: Hello, I'm Robert Martel, the Property Manager for the Brickbottom Artists Building. Would the residents of Brickbottom that are here raise your hand or stand up, please?

[Applause]

MR. ROBERT MARTEL: Okay. I could speak for the residents of Brickbottom to say that there hasn't been one of its 220 residents and workers who has ever mentioned to me any opposition to the Green Line Extension. However,

I-001-038

the storage and maintenance Yard 8 proposal is unacceptable across the city, yet we don't have a finished analysis of the alternative sites. The analysis on Mirror H offered in the DEIR is essentially the same analysis offered a year ago. Unused land at the BET, that's the Boston Engine Terminal, has not been thoroughly considered, and we don't know why. H, the less expensive alternative, is often

I-001-038

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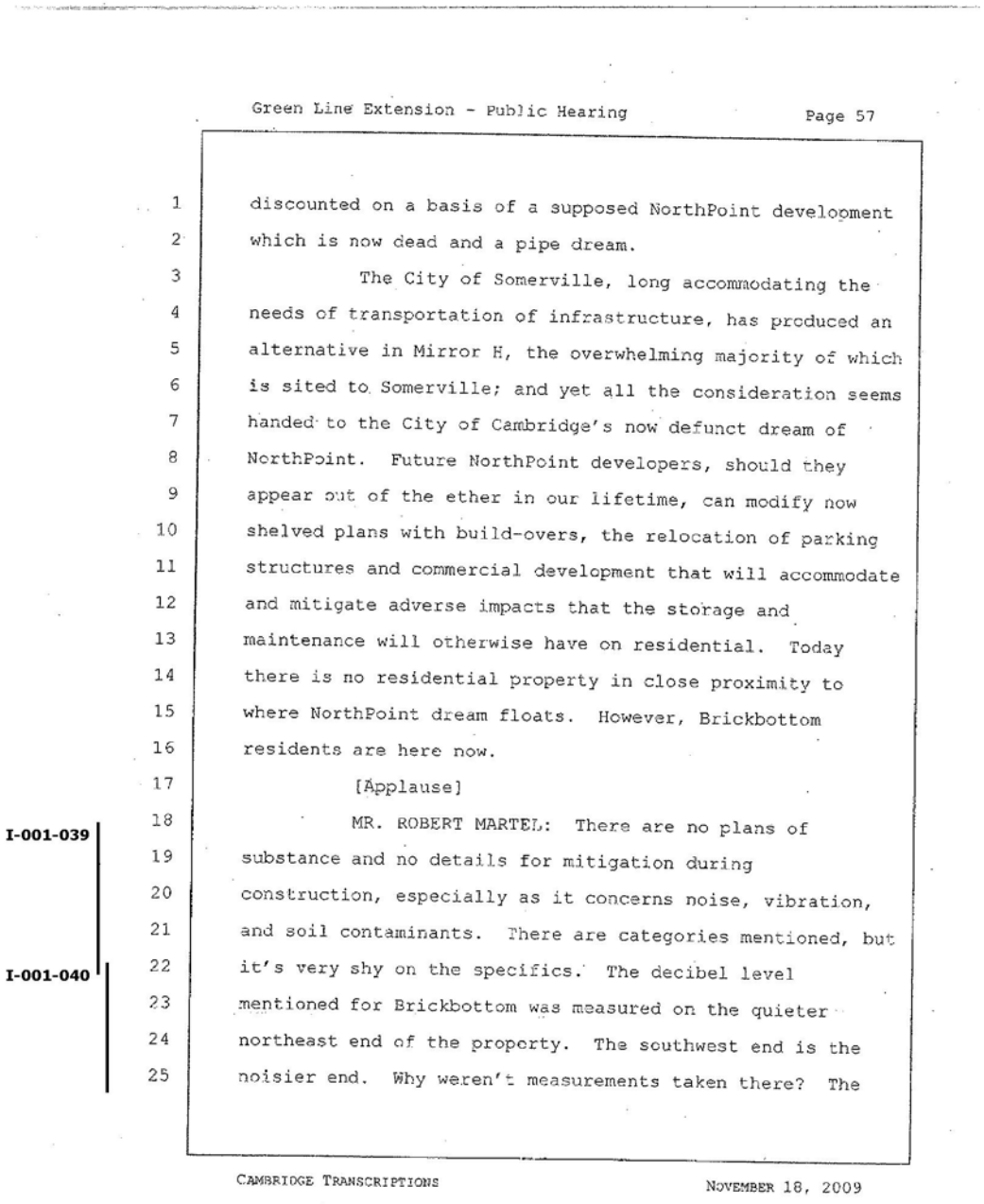

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discounted on a basis of a supposed NorthPoint development which is now dead and a pipe dream.

The City of Somerville, long accommodating the needs of transportation of infrastructure, has produced an alternative in Mirror H, the overwhelming majority of which is sited to Somerville; and yet all the consideration seems handed to the City of Cambridge's now defunct dream of NorthPoint. Future NorthPoint developers, should they appear out of the ether in our lifetime, can modify now shelved plans with build-overs, the relocation of parking structures and commercial development that will accommodate and mitigate adverse impacts that the storage and maintenance will otherwise have on residential. Today there is no residential property in close proximity to where NorthPoint dream floats. However, Brickbottom residents are here now.

[Applause]

MR. ROBERT MARTEL: There are no plans of substance and no details for mitigation during construction, especially as it concerns noise, vibration, and soil contaminants. There are categories mentioned, but it's very shy on the specifics. The decibel level mentioned for Brickbottom was measured on the quieter northeast end of the property. The southwest end is the noisier end. Why weren't measurements taken there? The

I-001-039

I-001-040

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I-001-039

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Pedestrian and vehicular access to abutting properties will be maintained at all times. Construction contractors will be required to comply with relevant federal, state, and local laws, regulations, and codes to eliminate or minimize adverse effects (such as noise and vibration levels, and traffic flow) to environmental and social resources. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the next phases of the Project: design and construction.

I-001-040

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-001-040

Brickbottom Artists Building is the only residence in the Green Line Extension that will be flanked on two sides by the Green Line trolley line rails. Why don't we have an analysis of sound and vibration on both sides?

I-001-041

The City of Somerville and its residents need regular oversight meetings for residents and stakeholders to meet with DOT and qualified experts to perform detailed oversight and community contact before, during, and after construction. We need to have written agreements about such oversight with DOT before the MEPA process concludes. We need written agreements as to the nature and extent of mitigations before construction. Mitigations, in fact, have yet to be identified.

MS. NANCY FARRELL: You need to wrap up, Mr. Martel.

MR. ROBERT MARTEL: We need a public process that can oversee the implementation of mitigations before and during and after construction. Thank you.

MS. NANCY FARRELL: Thank you very much.

[Applause]

MS. NANCY FARRELL: We have Jeff Roelofs, John Kyper, and Michael Hegarty coming up.

MR. JEFF ROELOFS: Good evening. I'm Jeff Roelofs, attorney for Brickbottom, and my first two comments really are directed at the public. This document,

I-001-041

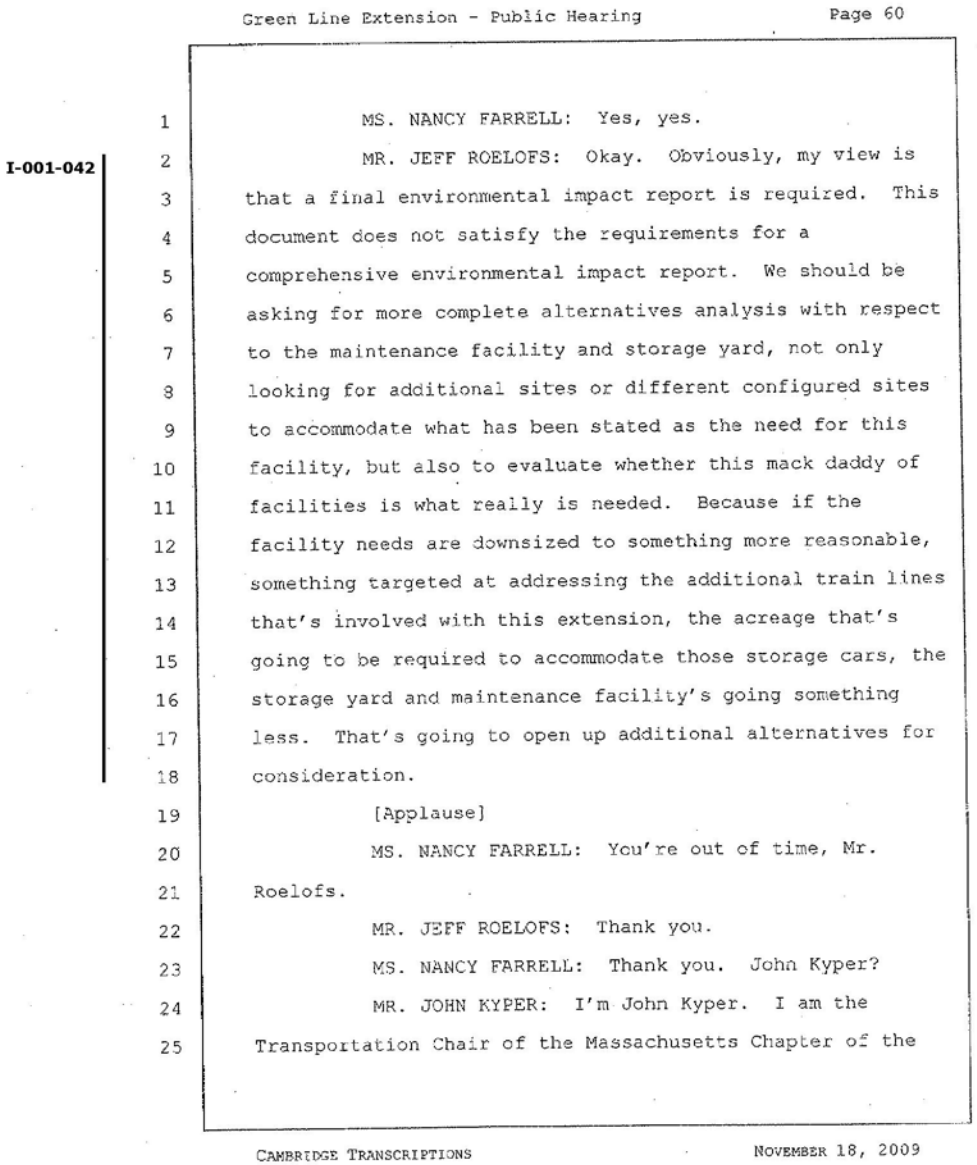
Chapter 8 of the FEIR identifies the proposed mitigation measures for the Green Line Extension Project, and the steps that will be followed to develop the final mitigation plan. In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project, including mitigation and construction.

although it's entitled the Draft EIR, you should know is being asked by the Department of Transportation, MassDOT, to be treated as the final EIR. The only reason this public meeting is happening tonight is because this project is within the MEPA process. The Department is looking to end the MEPA process. Your first comment, when you submit your comments in writing, should be, "Keep the MEPA process open, require the preparation of a Final Environmental Impact Report."

[Applause]

MR. JEFF ROELOFS: Don't lose sight of that because that is your context for additional public involvement in any meaningful context. My other point to the commenters is that your comments, to be most effective, should tie into the 2006 decision from the Secretary that defined the scope of what was supposed to be done for this document. So if you have a concern, I assume that in that document they required -- the Secretary required DOT to address that concern -- tie your concerns and your comments and requests for more information and analysis into that scope because you're more likely to get the Secretary to require something further if he agrees with you that that particular aspect of the scope was not satisfied.

Now, my comments are to the MEPA -- is the MEPA review analyst here tonight?



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I-001-042

MS. NANCY FARRELL: Yes, yes.

MR. JEFF ROELOFS: Okay. Obviously, my view is that a final environmental impact report is required. This document does not satisfy the requirements for a comprehensive environmental impact report. We should be asking for more complete alternatives analysis with respect to the maintenance facility and storage yard, not only looking for additional sites or different configured sites to accommodate what has been stated as the need for this facility, but also to evaluate whether this mack daddy of facilities is what really is needed. Because if the facility needs are downsized to something more reasonable, something targeted at addressing the additional train lines that's involved with this extension, the acreage that's going to be required to accommodate those storage cars, the storage yard and maintenance facility's going something less. That's going to open up additional alternatives for consideration.

[Applause]

MS. NANCY FARRELL: You're out of time, Mr. Roelofs.

MR. JEFF ROELOFS: Thank you.

MS. NANCY FARRELL: Thank you. John Kyper?

MR. JOHN KYPER: I'm John Kyper. I am the Transportation Chair of the Massachusetts Chapter of the

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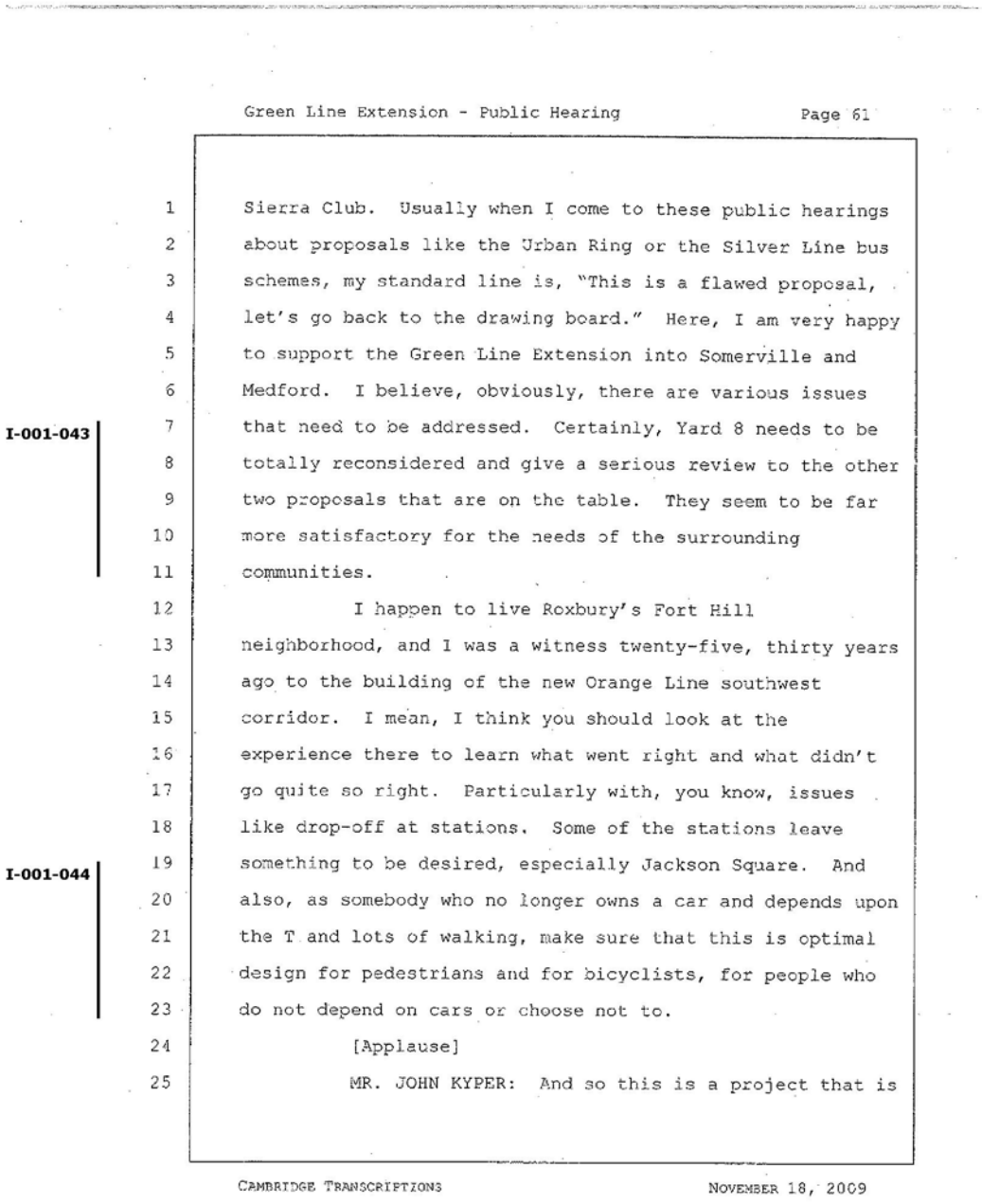
I-001-042

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.



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Sierra Club. Usually when I come to these public hearings about proposals like the Urban Ring or the Silver Line bus schemes, my standard line is, "This is a flawed proposal, let's go back to the drawing board." Here, I am very happy to support the Green Line Extension into Somerville and Medford. I believe, obviously, there are various issues that need to be addressed. Certainly, Yard 8 needs to be totally reconsidered and give a serious review to the other two proposals that are on the table. They seem to be far more satisfactory for the needs of the surrounding communities.

I happen to live Roxbury's Fort Hill neighborhood, and I was a witness twenty-five, thirty years ago to the building of the new Orange Line southwest corridor. I mean, I think you should look at the experience there to learn what went right and what didn't go quite so right. Particularly with, you know, issues like drop-off at stations. Some of the stations leave something to be desired, especially Jackson Square. And also, as somebody who no longer owns a car and depends upon the T and lots of walking, make sure that this is optimal design for pedestrians and for bicyclists, for people who do not depend on cars or choose not to.

[Applause]

MR. JOHN KYPER: And so this is a project that is

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I-001-043

I-001-044

I-001-043

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I-001-044

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In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

really, as was expressed, is long overdue. When I first moved down from Vermont in 1969 and took the Green Line out to Lechmere for some reason or another, my first reaction was, "Why does it end here?"

MS. NANCY FARRELL: And, unfortunately, you have to end there.

[Laughter]

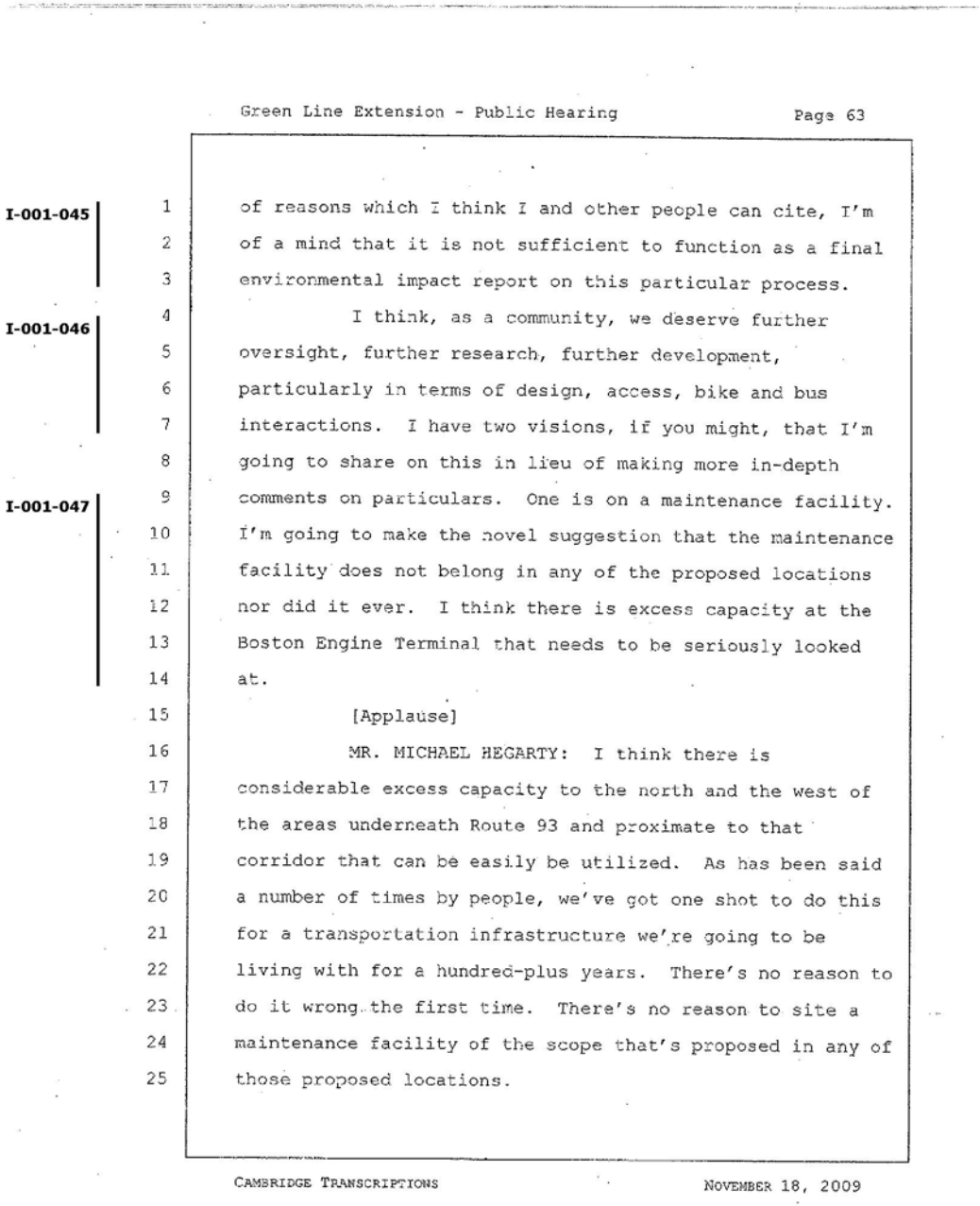
MR. JOHN KYPER: Yes. Well, the irony is I learned many years later that the current Lechmere Station looked so shabby because it was built as a temporary station because they were --

MS. NANCY FARRELL: And that was not a joke, Mr. Kyper. You're out of time.

MR. JOHN KYPER: Seriously, thank you.

MS. NANCY FARRELL: Thank you. Michael Hegarty, Scott Coolidge, and Adelaide Smith, are our next three speakers.

MR. MICHAEL HEGARTY: Hi, Michael Hegarty, East Cambridge resident. I want to start by saying how enthusiastic and how happy and how much I support and how excited I am about this entire project. I think, you know -- I know I personally, and I think my neighborhood and the community all resoundingly support this project. That being said, having spent a bit of time looking through the current Draft Environment Impact Report, I am, for a number



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of reasons which I think I and other people can cite, I'm of a mind that it is not sufficient to function as a final environmental impact report on this particular process.

I-001-046

I think, as a community, we deserve further oversight, further research, further development, particularly in terms of design, access, bike and bus interactions. I have two visions, if you might, that I'm going to share on this in lieu of making more in-depth comments on particulars. One is on a maintenance facility.

I-001-047

I'm going to make the novel suggestion that the maintenance facility does not belong in any of the proposed locations nor did it ever. I think there is excess capacity at the Boston Engine Terminal that needs to be seriously looked at.

[Applause]

MR. MICHAEL HEGARTY: I think there is considerable excess capacity to the north and the west of the areas underneath Route 93 and proximate to that corridor that can be easily be utilized. As has been said a number of times by people, we've got one shot to do this for a transportation infrastructure we're going to be living with for a hundred-plus years. There's no reason to do it wrong the first time. There's no reason to site a maintenance facility of the scope that's proposed in any of those proposed locations.

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I-001-045

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

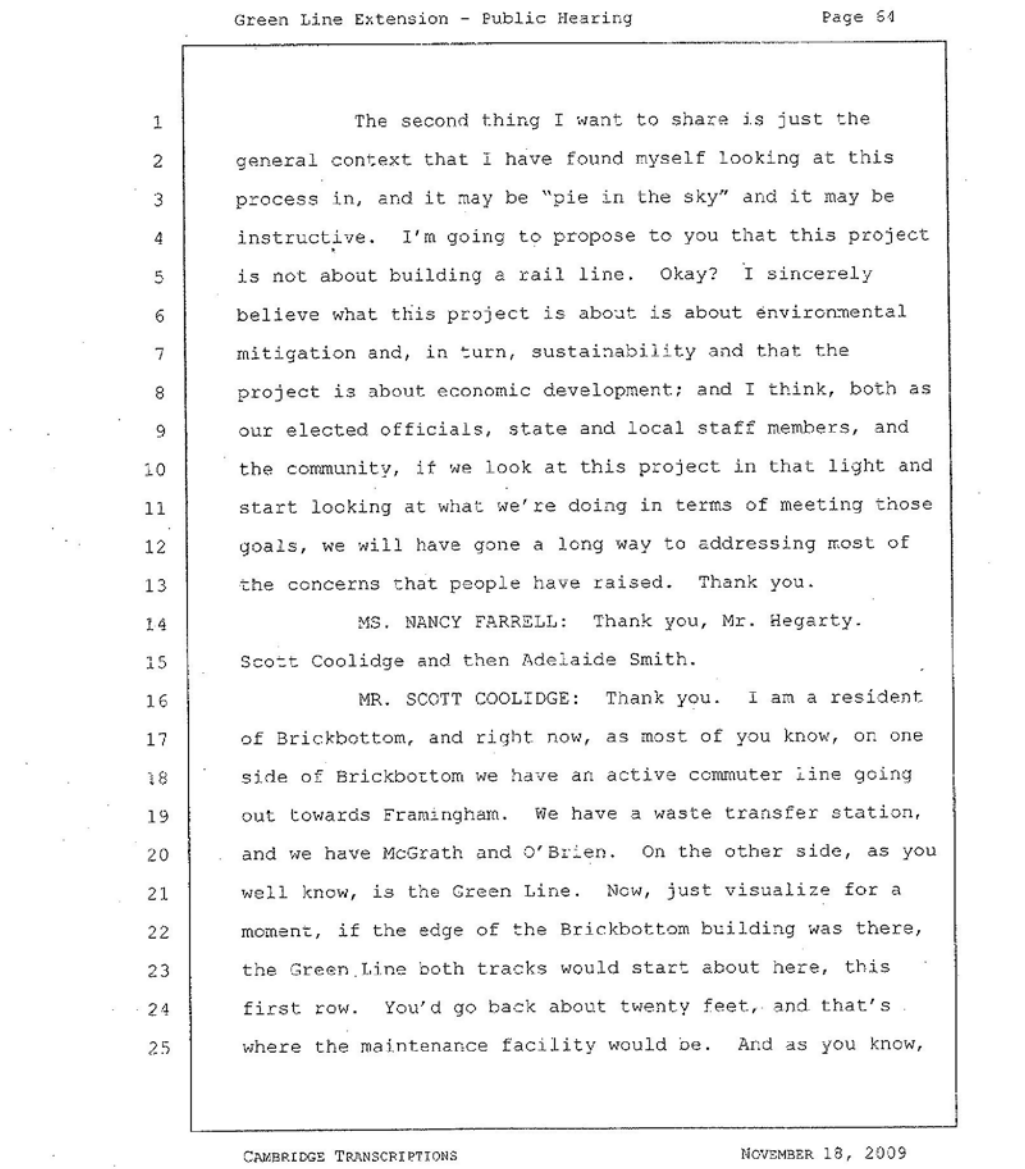
I-001-046

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-047

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility



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The second thing I want to share is just the general context that I have found myself looking at this process in, and it may be "pie in the sky" and it may be instructive. I'm going to propose to you that this project is not about building a rail line. Okay? I sincerely believe what this project is about is about environmental mitigation and, in turn, sustainability and that the project is about economic development; and I think, both as our elected officials, state and local staff members, and the community, if we look at this project in that light and start looking at what we're doing in terms of meeting those goals, we will have gone a long way to addressing most of the concerns that people have raised. Thank you.

MS. NANCY FARRELL: Thank you, Mr. Hegarty. Scott Coolidge and then Adelaide Smith.

MR. SCOTT COOLIDGE: Thank you. I am a resident of Brickbottom, and right now, as most of you know, on one side of Brickbottom we have an active commuter line going out towards Framingham. We have a waste transfer station, and we have McGrath and O'Brien. On the other side, as you well know, is the Green Line. Now, just visualize for a moment, if the edge of the Brickbottom building was there, the Green Line both tracks would start about here, this first row. You'd go back about twenty feet, and that's where the maintenance facility would be. And as you know,

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alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

it's a multi-level building. So again, as most people have said, it seems to be completely unacceptable for all of us. Thank you.

[Applause]

MR. NANCY FARRELL: Thank you, sir. Adelaide Smith, Connie Blazyk, and Carolyn Rosen, the next three.

MS. ADELAIDE SMITH: Adelaide Smith. I'm also a resident of Brickbottom, and I would like to just quote from the Secretary's Certificate just to speak more to what people have been talking about. But first I'd like to say that our manager is right, no one is against the Green Line at Brickbottom. I mean, we know where we built this artists' enclave. So it's not like don't put anything there.

However, the Secretary's Certificate reads, "No segment of the population should be denied environmental benefits or should bear a disproportionate burden of environmental impacts." And I would suggest that, in fact, that is what's being done to those of us who live in Brickbottom. We are the only residential building in the area. If we had the maintenance facility and/or the storage, we will have light blocked from artists. Sound and vibration is, as has already been said, going to be probably impossible to mitigate; and we have 220 people, including children, who are going to impacted by this. And

also, I'd just like to say, you know, severe economic issues really should not be able to mitigate these issues. We can't say there's not enough money, and therefore we have to do something. Thank you.

MS. NANCY FARRELL: Thank you. Connie Blazyk?

MS. CONNIE BLAZYK: Hi, my name is Connie Blazyk. I'm also a member of the Brickbottom community and a very concerned citizen about the Yard 8 maintenance facility and storage yard proposal and the DEIR. As many others have said, the proposed Yard 8 maintenance facility and large storage yard will take 11.5 acres of land from the City of Somerville, much of it privately held, land that is already permitted and zoned for development; and it will remove it from the City's commercial tax base.

The Yard 8 proposal also creates a permanent barrier to neighborhood cohesion by dissecting the Inner Belt from the Brickbottom area. The Yard 8 facility and storage yard will have a severe impact on the residents of Brickbottom, as well as other residents in the area. Contrary to what has been said here tonight, there will be no ramification in terms of impact on residents, and that is particularly the case in terms of mitigation as outlined in the DEIR. It is simply confusing and inefficient. Only 40 residences in Brickbottom will get any soundproofing out of a building of 155 units. Brickbottom, as well as other

I-001-048

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As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-001-048

impacted buildings, including the Glass Factory, need mitigation, especially noise and vibration mitigation, in place before construction not after.

[Applause]

MS. CONNIE BLAZYK: We need a process in which to address mitigation issues during construction, as well as after the fact, providing us with a means of redress if specific project goals are not met. And a very sad example of that was recently born to light in *The Boston Globe*, a story of a woman living in the Sullivan Square area, having lived in a home for thirty years and she has redress. There's no money left with which for her to rectify her situation.

I-001-049

Finally, the Yard 8 decision did not involve the Citizen's Advisory Group in evaluating potential sites for the maintenance facility and storage yard. Additionally, mandated land use planning was not performed. That is a violation of the Certificate of the Secretary's mandate for community involvement in this project. The DEIR and what has been said here tonight, promises were made to more fully examine both the Mirror H and L --

MS. NANCY FARRELL: Time, please.

MS. CONNIE BLAZYK: -- Options. We will be waiting. We applaud those details. We want to see them very soon. Thank you very much.

I-001-049

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

MS. NANCY FARRELL: Thank you. The next three speakers are Carolyn Rosen, Peter Marquez, and George Gabin.

MS. CAROLYN ROSEN: My name is Carolyn Rosen. I'm the chairperson of GLAM, and we have membership in the audience. I'm not going to repeat much of what the Brickbottom attorney already said because that was part of my speech. This is an open-ended environmental contract that basically asked us to trust EOT. Basically, it says, we're going to recommend Yard 8, but we're going to study Yard 8. We're going to put a 300-car parking garage at Route 16, but we're not going to a parking garage at Route 16. This is an open-ended environmental contract that's an oxymoron that does not provide details with meaningful outcomes.

I-001-050

GLAM has filed a civil rights case with the Federal Transportation Administration around the lack of environmental justice and disability authentic participation within this project. That civil rights case is now under review by the FTA and includes a lack of participation up to hate crimes that have committed against our groups that we have informed EOT of, of which they have shaken their head and said, I have no responsibility.

We are now also talking to attorneys about an injunction between taking this project from College Ave. to

I-001-050

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Route 16. We do not believe that the impact upon our community of taking land acquisition and property taxes that are up to $400,000, and we can test EOT's numbers as being inaccurate in this report, another shoddy job that they've done, and the impact on a HUD housing program that houses people with disabilities and people of African-American, who are vulnerable populations.

We do not believe that one federal law trumps another federal law around civil rights. This project is a joke in the fact that there is not enough money to even maintain the systems that we have right at the moment. GLAM is recommending that Route 16 be dropped out of the DEIR due to its heavy mitigation impact on EJ populations, and we are asking that this project be slowed down until money can be identified.

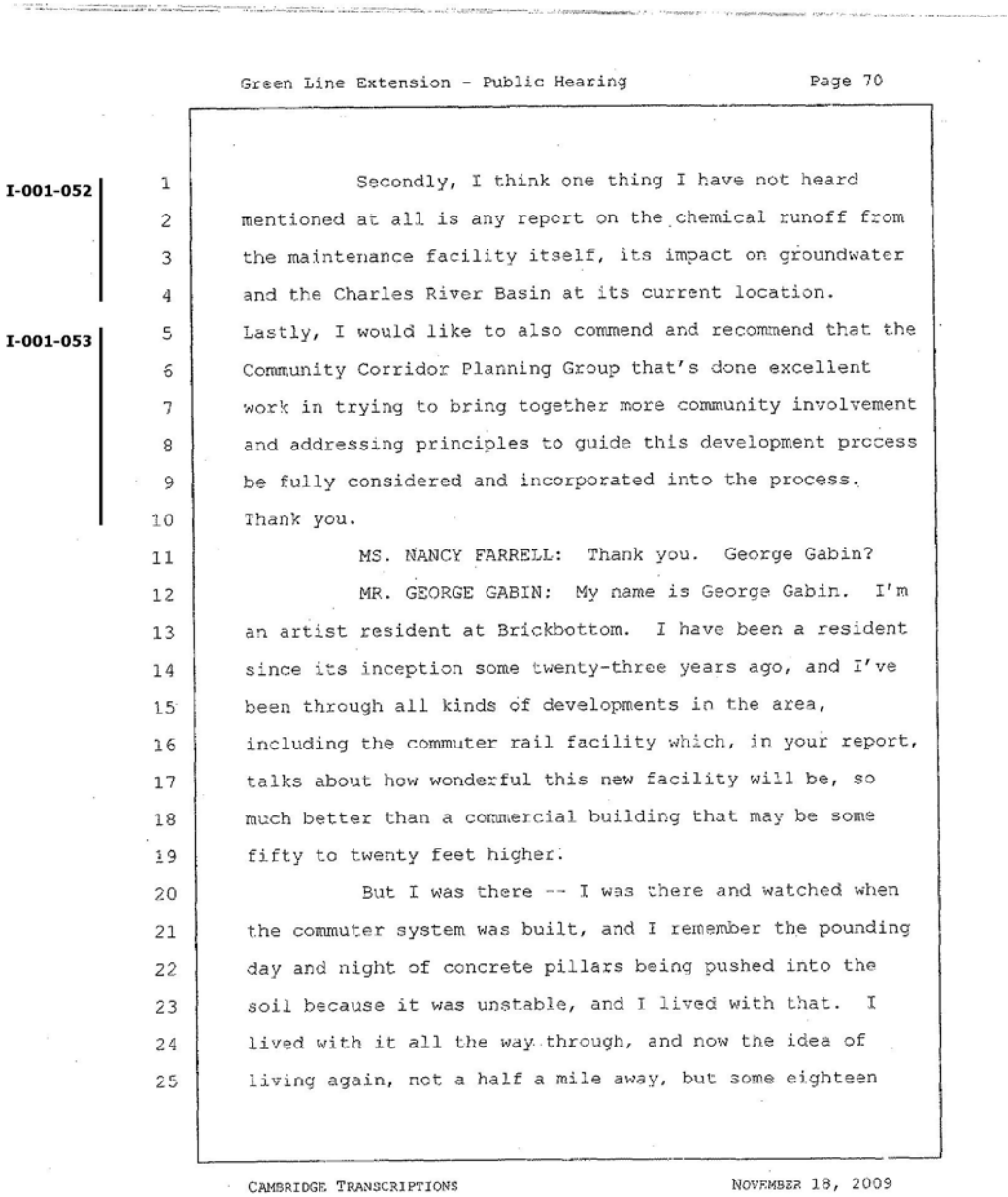
I-001-051

MS. NANCY FARRELL: Time. Thank you, Ms. Rosen. Peter Marquez, George Gabin, and Rob Cassel.

MR. PETER MARQUEZ: My comments will be brief. I just want to thank everybody for doing the work they have done so far. However, the DEIR is inadequate. I believe that more work needs to be done in order to fully flesh out the environmental impacts and quality of life impacts, which are cursory at best in this report. Noise and vibration is additive, and we need to consider that as we move forward.

I-001-051

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



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Secondly, I think one thing I have not heard mentioned at all is any report on the chemical runoff from the maintenance facility itself, its impact on groundwater and the Charles River Basin at its current location. Lastly, I would like to also commend and recommend that the Community Corridor Planning Group that's done excellent work in trying to bring together more community involvement and addressing principles to guide this development process be fully considered and incorporated into the process. Thank you.

MS. NANCY FARRELL: Thank you. George Gabin?

MR. GEORGE GABIN: My name is George Gabin. I'm an artist resident at Brickbottom. I have been a resident since its inception some twenty-three years ago, and I've been through all kinds of developments in the area, including the commuter rail facility which, in your report, talks about how wonderful this new facility will be, so much better than a commercial building that may be some fifty to twenty feet higher.

But I was there -- I was there and watched when the commuter system was built, and I remember the pounding day and night of concrete pillars being pushed into the soil because it was unstable, and I lived with that. I lived with it all the way through, and now the idea of living again, not a half a mile away, but some eighteen

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As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

I-001-053

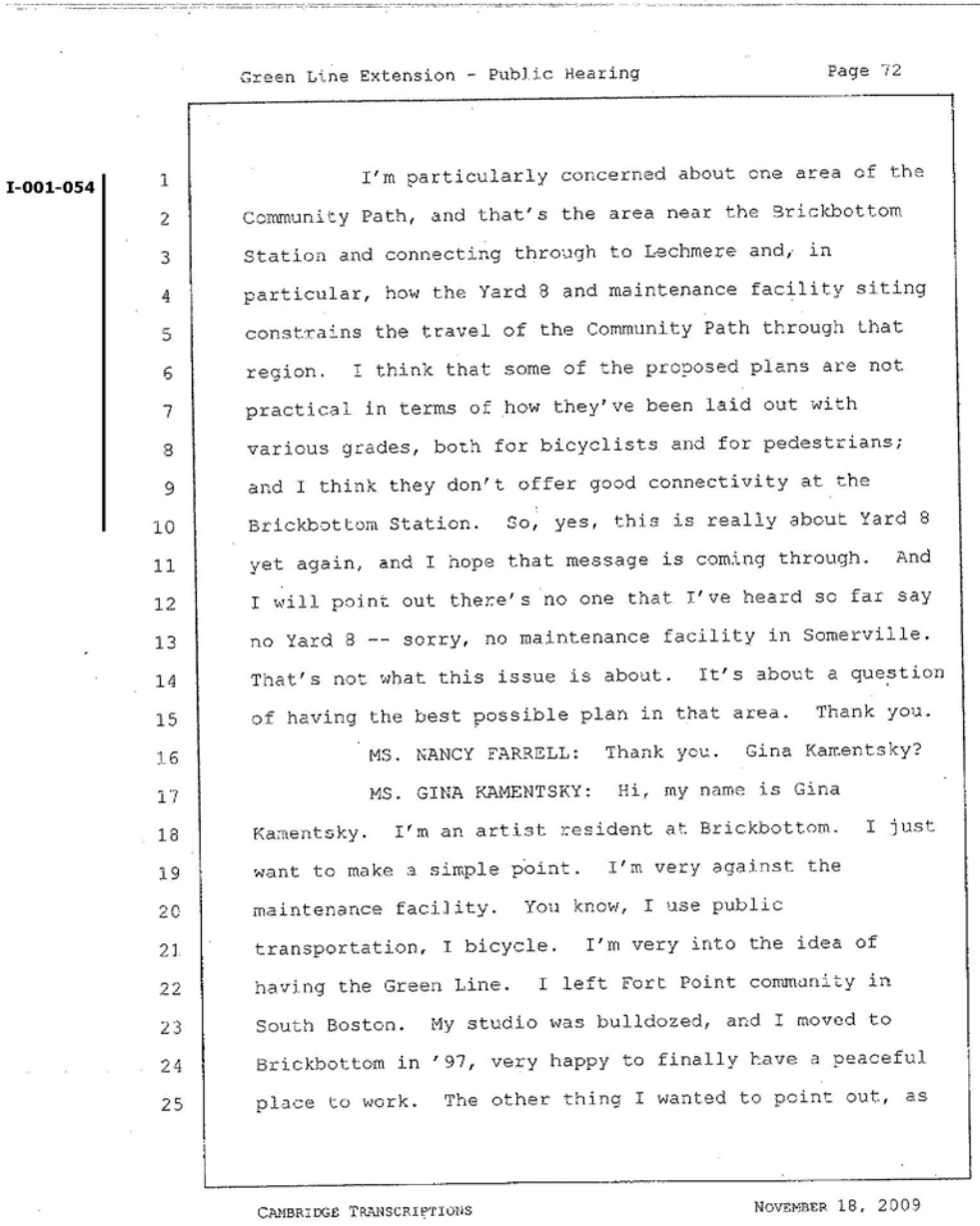
MassDOT has reviewed and considered the "Core Community Principles" for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

feet boggles the imagination of anybody. We are a creative group of people who are being threatened, and the threat is without end. From the moment your bulldozers come, we will be in misery; and it will not end as long as we stay in that building, and yet we are stuck. We are the victims of this project, and I say to you, I'm seventy-eight years old -- soon I'll be seventy-nine -- if it comes to it, I will be the first one laying down in front of those bulldozers.

[Applause]

MS. NANCY FARRELL: Thank you, sir. Rob Cassel, and then the next two speakers are Gina Kamentsky and Ramon Bueno.

MR. ROB CASSEL: George, you're a tough act to follow. Hi, I'm Rob Cassel. I'm also a resident at Brickbottom; and I'd like to speak briefly about a point that a number of folks have brought up today, an area where I believe the DEIR is deficient, and that's with the Community Path and how that's been laid out. I think the Community Path provides not just bicycle access, as many peopie think of it but foot access and, tied into the stations correctly, is going to be a tremendous asset for areas that aren't particularly near the stations that are being proposed for the Green Line, will draw in even more passengers, get more cars off the road, and encourage more economic development.



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I'm particularly concerned about one area of the Community Path, and that's the area near the Brickbottom Station and connecting through to Lechmere and, in particular, how the Yard 8 and maintenance facility siting constrains the travel of the Community Path through that region. I think that some of the proposed plans are not practical in terms of how they've been laid out with various grades, both for bicyclists and for pedestrians; and I think they don't offer good connectivity at the Brickbottom Station. So, yes, this is really about Yard 8 yet again, and I hope that message is coming through. And I will point out there's no one that I've heard so far say no Yard 8 -- sorry, no maintenance facility in Somerville. That's not what this issue is about. It's about a question of having the best possible plan in that area. Thank you.

MS. NANCY FARRELL: Thank you. Gina Kamentsky?

MS. GINA KAMENTSKY: Hi, my name is Gina Kamentsky. I'm an artist resident at Brickbottom. I just want to make a simple point. I'm very against the maintenance facility. You know, I use public transportation, I bicycle. I'm very into the idea of having the Green Line. I left Fort Point community in South Boston. My studio was bulldozed, and I moved to Brickbottom in '97, very happy to finally have a peaceful place to work. The other thing I wanted to point out, as

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MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

artists, many of us we -- I'm there twenty-four-seven. I sleep there, I work there. I'm very impacted by what goes on around me, and I just want everyone to consider that when you think about this. Thank you.

MS. NANCY FARRELL: Thank you. Ramon Bueno?

MR. RAMON BUENO: Good evening. I've lived in Somerville for about thirty years and at Brickbottom for about twenty-two years. I'm not going to repeat most of what's been said. I just one to highlight one particular angle, which is that our community has been a strong supporter and very excited about the Green Line Extension from the beginning. So that's not an issue for us, and that's despite the fact that, you know, we have a commuter line running a few feet from our building, cargo trains on both sides. Despite the fact that, once it's running, for 365 days a year from morning to night, we're going to have trains on both -- you know, the split for Union Square and the other one is right next to our building. So that's not an issue for most of us either. As a community, we support that.

I-001-055

The issue is with Yard 8 and the maintenance facility is, is there a limit to what a community has to put up with? We feel like there is a limit, and the impact is going to be permanent, inordinate, and disproportionate impact on our community, as well as to the City and all the

I-001-055

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-055

issues that the aldermen pointed out for development. So we feel that this report cannot be the final one, and that we hope that the alternatives are actually being seriously looked at, not just as a palliative for the opposition. Thank you very much.

[Applause]

MS. NANCY FARRELL: The next three speakers are Chip Olson, William Wood, and Heather Van Aelst.

MR. CHIP OLSON: Good evening. My name's Chip Olson. I live at 80 Pritchard Ave. in Somerville, and my comments have nothing to do with Brickbottom. I wanted to touch on one specific issue with regard to construction mitigation, which is that, as you know, there's going to be a number of bridges that need to be rebuilt. I live near one of these, the Broadway Bridge in Somerville and Ball Square, and every year the City of Somerville closes that bridge and that stretch of Broadway for the fireworks at Trum Field. This results in all the traffic going eastbound on Broadway being routed down my narrow one-way residential street. A couple of years ago a gasoline tanker got stuck because it couldn't make the turn at the end of the street.

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I don't particularly want all the traffic for two years of the bridge reconstruction going down my street. So I wanted to ask that a lot of consideration be given to,

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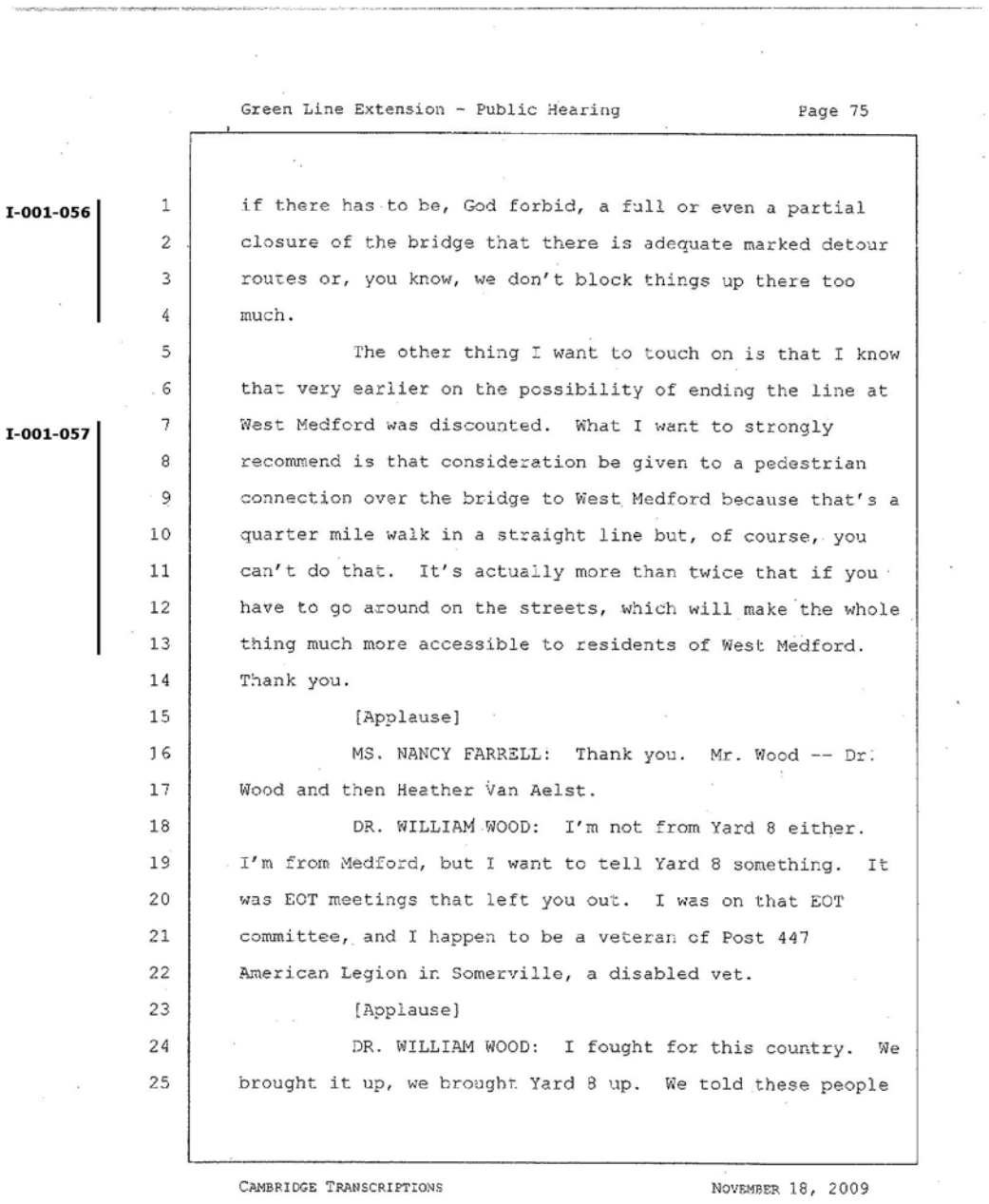
Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Detailed construction plans will be developed in the next phase of the Project. Affected bridges are described in DEIR/EA Section 3.7.2. Detour routes and emergency access during construction will be developed during preliminary engineering as part of the Traffic Management Plan. At least one bridge will need to be closed during construction (Medford Street). A temporary bridge may be able to maintain a single lane of traffic at the Broadway Bridge. For all other bridges, at least one lane will be maintained during construction. Pedestrian and vehicular access to abutting properties will be maintained at all times. Project bridge designs and construction staging plans will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during design and construction.



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if there has to be, God forbid, a full or even a partial closure of the bridge that there is adequate marked detour routes or, you know, we don't block things up there too much.

The other thing I want to touch on is that I know that very earlier on the possibility of ending the line at

I-001-057

West Medford was discounted. What I want to strongly recommend is that consideration be given to a pedestrian connection over the bridge to West Medford because that's a quarter mile walk in a straight line but, of course, you can't do that. It's actually more than twice that if you have to go around on the streets, which will make the whole thing much more accessible to residents of West Medford. Thank you.

[Applause]

MS. NANCY FARRELL: Thank you. Mr. Wood -- Dr. Wood and then Heather Van Aelst.

DR. WILLIAM WOOD: I'm not from Yard 8 either. I'm from Medford, but I want to tell Yard 8 something. It was EOT meetings that left you out. I was on that EOT committee, and I happen to be a veteran of Post 447 American Legion in Somerville, a disabled vet.

[Applause]

DR. WILLIAM WOOD: I fought for this country. We brought it up, we brought Yard 8 up. We told these people

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Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

that not everybody in Somerville agreed with all of the Green Line Extension. I too support the Green Line Extension and publicly have said so; and when I publicly said this, my brothers and sisters said, "You don't support the Green Line." Well, that was a lie. I was then castrated in your newspaper, saying I don't support the disabled community or the environmental community because I wanted to save West Medford, an African American community, from the things you're talking about about Brickbottom. The DEIR report is not sufficient. I actually went out and got a person who does environmental justice for free to read the original comments. She's read them again. It's not efficient enough for DEIR.

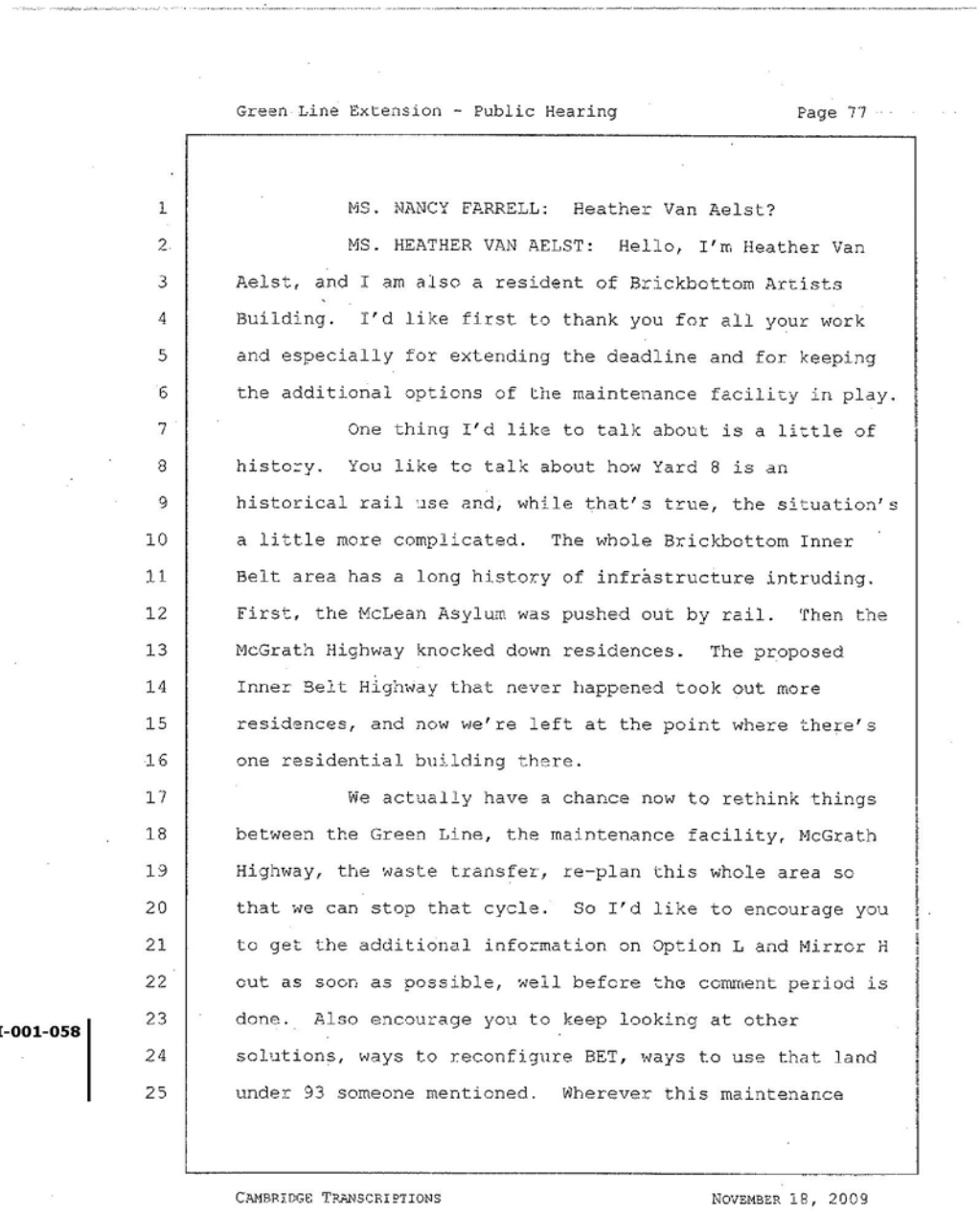
We set a group up called GLAM. It was an opposing group, opposing to nothing. We were an educational group. We would take people in from everywhere. We said to EOT over and over again, you need more community activity in this meeting. You need people talking. You need people dealing with the subject.

MS. NANCY FARRELL: Bill, you're out of time.

DR. WILLIAM WOOD: I'm out of time. That's what usually happens at -- sorry, it's not EOT anymore, whatever it's called.

MS. NANCY FARRELL: Thank you.

[Applause]



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MS. NANCY FARRELL: Heather Van Aelst?

MS. HEATHER VAN AELST: Hello, I'm Heather Van Aelst, and I am also a resident of Brickbottom Artists Building. I'd like first to thank you for all your work and especially for extending the deadline and for keeping the additional options of the maintenance facility in play.

One thing I'd like to talk about is a little of history. You like to talk about how Yard 8 is an historical rail use and, while that's true, the situation's a little more complicated. The whole Brickbottom Inner Belt area has a long history of infrastructure intruding. First, the McLean Asylum was pushed out by rail. Then the McGrath Highway knocked down residences. The proposed Inner Belt Highway that never happened took out more residences, and now we're left at the point where there's one residential building there.

We actually have a chance now to rethink things between the Green Line, the maintenance facility, McGrath Highway, the waste transfer, re-plan this whole area so that we can stop that cycle. So I'd like to encourage you to get the additional information on Option L and Mirror H out as soon as possible, well before the comment period is done. Also encourage you to keep looking at other solutions, ways to reconfigure BET, ways to use that land under 93 someone mentioned. Wherever this maintenance

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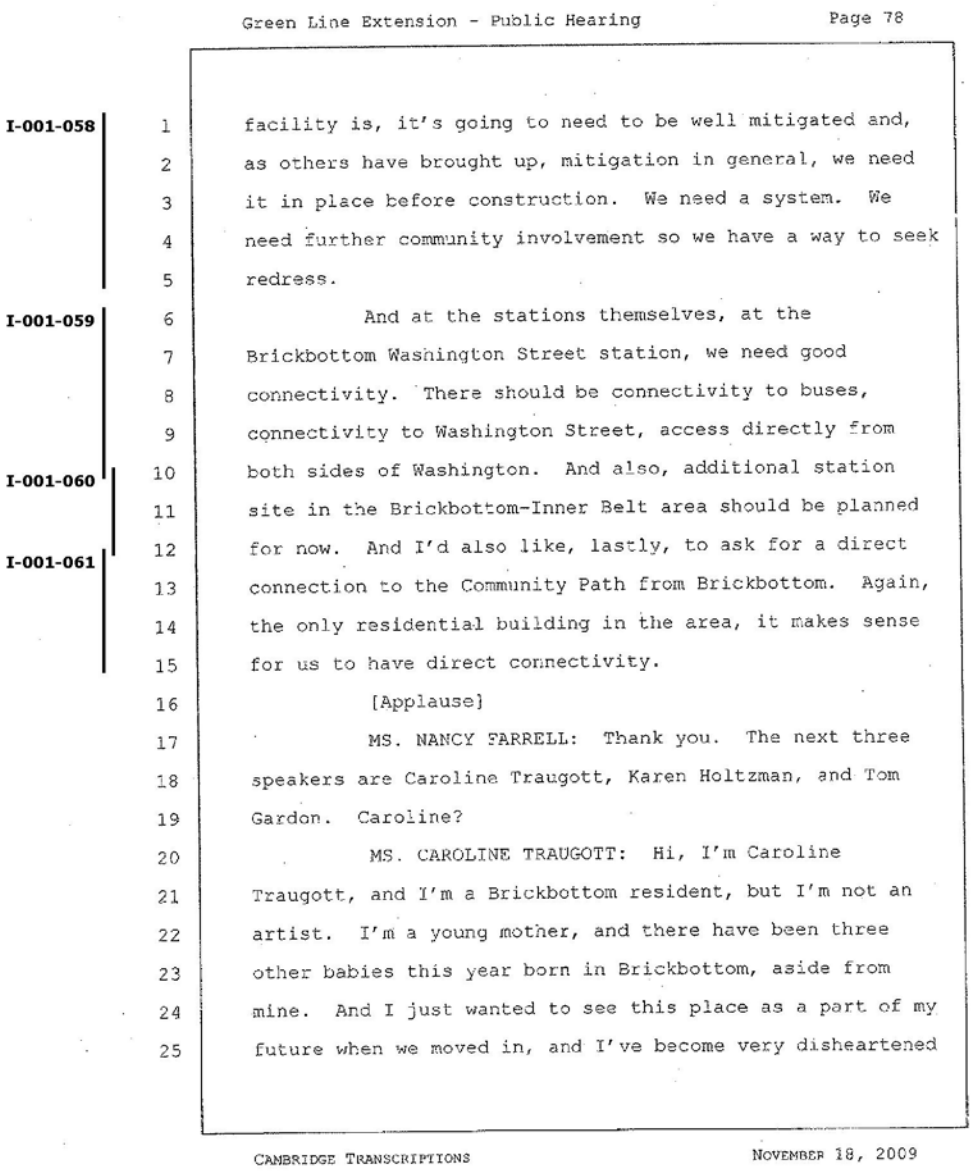
An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.



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I-001-058 facility is, it's going to need to be well mitigated and, as others have brought up, mitigation in general, we need it in place before construction. We need a system. We need further community involvement so we have a way to seek redress.

I-001-059 And at the stations themselves, at the Brickbottom Washington Street station, we need good connectivity. There should be connectivity to buses, connectivity to Washington Street, access directly from both sides of Washington. And also, additional station site in the Brickbottom-Inner Belt area should be planned for now. And I'd also like, lastly, to ask for a direct connection to the Community Path from Brickbottom. Again, the only residential building in the area, it makes sense for us to have direct connectivity.

[Applause]

MS. NANCY FARRELL: Thank you. The next three speakers are Caroline Traugott, Karen Holtzman, and Tom Gardon. Caroline?

MS. CAROLINE TRAUGOTT: Hi, I'm Caroline Traugott, and I'm a Brickbottom resident, but I'm not an artist. I'm a young mother, and there have been three other babies this year born in Brickbottom, aside from mine. And I just wanted to see this place as a part of my future when we moved in, and I've become very disheartened

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I-001-059

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

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As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-001-061

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

about Yard 8, obviously. And I heard you, Kate, say many times in your speech how proud you were of not moving residents; but I can assure you that, if this goes through, people will move, and you can't let that happen. That cannot happen. Thank you.

MS. NANCY FARRELL: Thank you. Karen Holtzman and Tom Gardon.

MS. KAREN HOLTZMAN: My name is Karen Holtzman and, yes, I live at Brickbottom. I've lived there for twenty-two years. My home on the top floor of the Cannery Building will be about eighteen feet from the Green Line Extension tracks and a few hundred feet from the proposed maintenance facility and storage yard. For most of those twenty-two years, I have tramped down the McGrath Highway to get to Lechmere Station to take the Green Line to work. This walk is often unpleasant, and I have always looked forward to having a Green Line station closer to my home. However, I'm opposed to the siting of the maintenance facility and storage yard in Yard 8, and I'm opposed to an ill-conceived Green Line Extension.

Reading through the DEIR/EA, I see many problems with construction and mitigation of the Green Line, as well as the siting of the maintenance facility and storage yard. There are many vague and deceptive or misleading statements. I don't have time to elaborate on many of them

here obviously, and many other people have hit on them. But let me just give one example specific. On page 5-113 it says, and I quote, "Rail operations alone would increase noise levels at the Brickbottom lofts from 57.6 dB(a) to 75.3 dB(a), which would constitute a severe impact. The addition of the maintenance facility noise to this scenario would increase overall noise levels to 76.4 dB(a), an increase of only 1.1 dB(a)."

First, the second statement I quoted is disingenuous. A maintenance facility and storage yard for eighty cars would be running twenty-four hours seven days a week. The Green Line does not run around the clock. With the maintenance facility and storage yard, the extreme rise in the noise level would be an all day every day event. There would not be an hour or four hours when there would respite from the noise, vibration, and lights. Second, as noted on page 5-118, some residences on upper floors, "would not benefit from a potential noise barrier." For those, it is suggested that exposure to severe noise could perhaps be mitigated --

MS. NANCY FARRELL: You're out of time.

MS. KAREN HOLTZMAN: -- by "adding windows," and it won't work. That's all I'm saying.

[Applause]

MS. KAREN HOLTZMAN: And no one is going to

compensate me for the loss when I can't live there from twenty-four hours a day noise, and you are not taking my property but, in effect, you are.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Tom Gardon, then Jim McGinness and Doug McCall.

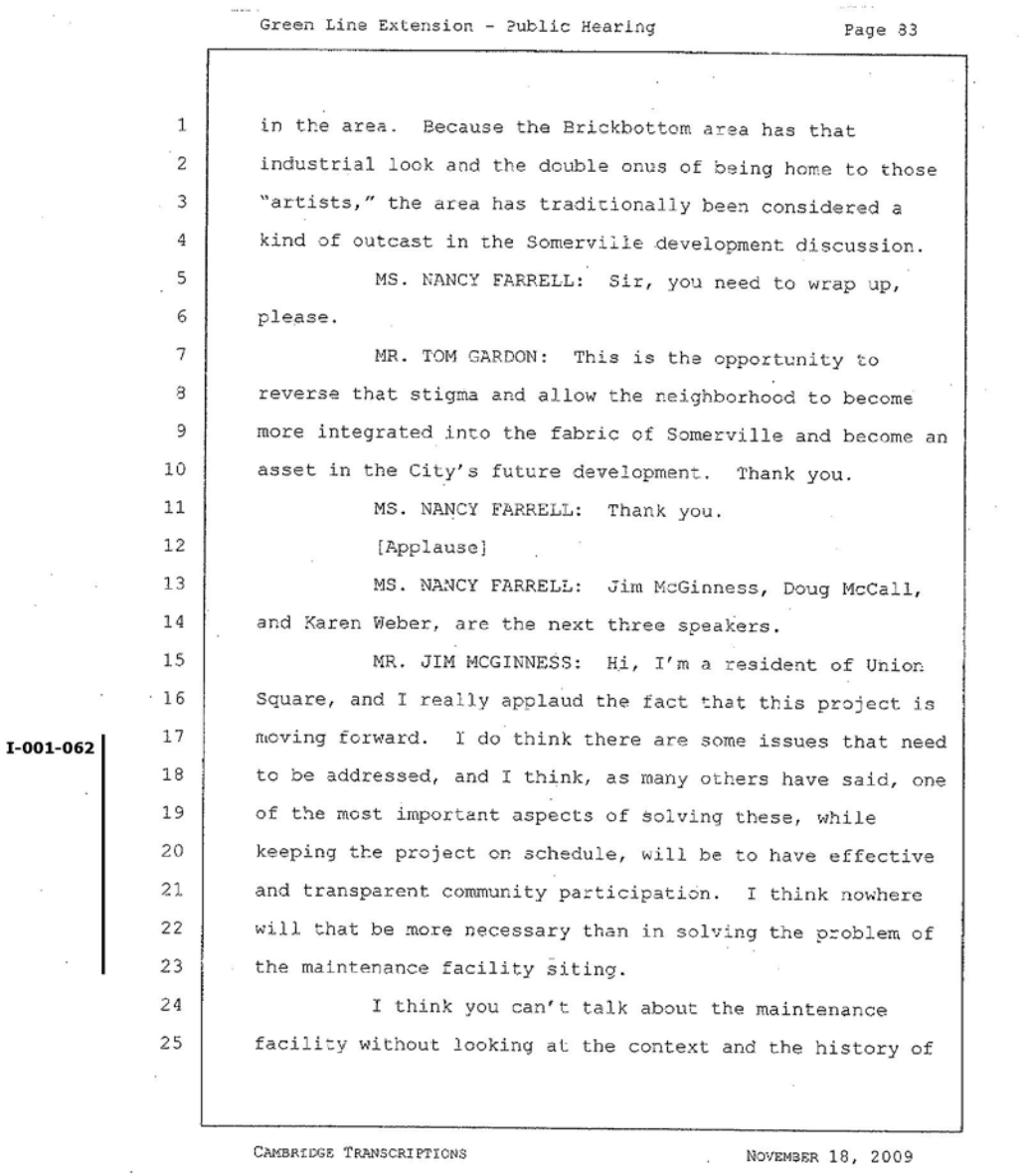
MR. TOM GARDON: I'm another non-artist resident of Brickbottom and, yes, I do support the Green Line Extension, of course. The DEIR speaks to environmental justice, and I suspect there are many ways, both legally and literally, to interpret that phrase. But if there is an injustice being perpetrated in this proposal, it is on the Brickbottom/Inner Belt community and, by extension, the City of Somerville.

Brickbottom is being asked to acquiesce to being surrounded by two Green Line tracks that would be operating from 5:30 a.m. until 12:30 p.m. There are being asked to allow the construction and the twenty-four/seven operation of a maintenance facility and storage yard to be located yards away from the buildings. The City of Somerville is being asked once again to bear the brunt of project construction and land-takings, while losing hope for future development. The citizens of Somerville are being told that there will be no future property tax relief because

the MBTA is taking one of the few remaining parcels of developable land in the City. And the residents of Brickbottom are being told that they are not relevant in the expansion plans of the MBTA, that there will be negligible monies allotted for mitigation and that any benefit that a Green Line station in the area might bring will be offset by 11.5 acres of noise, vibration, and pollutants that will affect the lives of residents and the City's growth.

The DEIR states that, because Brickbottom is already situated next to a rail yard, the residents will find little change in the area. Like many sections of the report, this fantasy speaks to the lofty hopes and aspirations of the MBTA and hearkens not at all to reality. The rail activity in the area adjacent to Yard 8 is sporadic, sometimes not existent for days, and has minimal impact on the community. To suggest that construction of a maintenance facility and storage yard will somehow be little more than a nuisance is disingenuous.

The Brickbottom Artists buildings have been a point of focus in many of these meetings, and I worry that the residents of the buildings are being overlooked. There are 220 people occupying the buildings. There are 155 units in the building. There are people who consider the area home, raise families, pay taxes, and are happy to be



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in the area. Because the Brickbottom area has that industrial look and the double onus of being home to those "artists," the area has traditionally been considered a kind of outcast in the Somerville development discussion.

MS. NANCY FARRELL: Sir, you need to wrap up, please.

MR. TOM GARDON: This is the opportunity to reverse that stigma and allow the neighborhood to become more integrated into the fabric of Somerville and become an asset in the City's future development. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Jim McGinness, Doug McCall, and Karen Weber, are the next three speakers.

MR. JIM MCGINNESS: Hi, I'm a resident of Union Square, and I really applaud the fact that this project is moving forward. I do think there are some issues that need to be addressed, and I think, as many others have said, one of the most important aspects of solving these, while keeping the project on schedule, will be to have effective and transparent community participation. I think nowhere will that be more necessary than in solving the problem of the maintenance facility siting.

I think you can't talk about the maintenance facility without looking at the context and the history of

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I-001-062

I-001-062

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

regional transportation impact on Somerville. Somerville right now has major roadways, I93, Routes 28 and 38, cutting through it. Railroad right of ways slice the City into pieces that have trouble communicating. They interfere with emergency access, commerce, and mobility. There are other major maintenance facilities, the bus maintenance in Charlestown, the Boston Engine Terminal, a proposed bus terminal, a maintenance facility in Wellington just across the river. I think, in evaluating the impact of this maintenance facility, you have to take previous history and the heavy burden that this particular area already bears into account.

And perhaps more important, I think the overarching goal, as stated in the Secretary's Certificate policy goal within MEPA review is for the use and reuse of land, is to direct public infrastructure investments to spur revitalization of previously developed urban sites over underdeveloped green field sites. This is really the framework in which this project should have been evaluated, and I think nowhere is the failure of realistic land use planning more evident than in the way in which the choices for maintenance facility siting were made. I think the DEIR basically looks at direct, frankly, trivial impacts, the costs of property-takings, and job losses but, of course, there's much bigger things on the table. And for

Somerville and for the region as whole, that translates to facilitating the development of Inner Belt, more than 100 acres which could transform the economic situation of Somerville and provide a huge amount of additional payroll taxes to the state.

BY NANCY FARRELL: Jim, you're out of time.

MR. JIM MCGINNESS: Okay. So anyway, I hope that this project remains on-track and that in the future we're able to have a strong community process to resolve this question. Thank you.

BY NANCY FARRELL: Thank you.

[Applause]

BY NANCY FARRELL: Doug McCall, Karen Weber, and Beverly Sky are the next three speakers. Doug McCall? Okay. I think we lost him. Karen Weber, and then Beverly Sky, and Joel Weber.

MS. KAREN WEBER: Good evening. It's a delight to be here and see the tension of the community and the rail, and hopefully all of this is going to be resolved in a very fruitful and productive way so that everyone can really appreciate how we can move into the future and into a green future because, obviously, we need to create our spaces in a sustainable and healthy way. And so that brings me to suggest that, in all of our conversations, I haven't heard anything about looking at the stations

I-001-063

I-001-063

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual designs. Detailed designs for each station, the maintenance facility, and the entire Project will be refined during the preliminary engineering phase. As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR.

I-001-063

themselves for a green type of building, looking at solar in terms of lighting and providing electricity, and green roofs.

For those of you who don't know, I don't know if you can see a picture here of buildings that have plants on them, some vegetation. There's one little space in Somerville on Prospect Hill that has one, but hopefully, there'll be many more. And this would be an incredible opportunity to help with sound mitigation, storm water mitigation, giving it that special touch that would give you something that really could be a leader for the MBTA, for Somerville, and for the state. Thank you very much.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Beverly Sky?

MS. BEVERLY SKY: Thank you. I'm one of the founding artists at Brickbottom, and I've been there for twenty-two years. And although most of us have gotten used to it, at around twelve o'clock at night when the trains are occasionally idling right outside of our building, you can feel the vibration in our brick floors. It's a brick building. That's why it's called Brickbottom, and the vibration is really intense and will keep you up while those trains are idling.

But I just want to say that I'm just so disturbed

that we've been writing letters for years now, and that the maintenance facility is still taken seriously to be located right next to our building is just very disturbing to me and shows a disregard for the lives of all the families that live at Brickbottom. And I just want to say that I would be right next to George when the bulldozers pull up, if they should. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Joel Weber, Rafael Mares, and then Steve Mackey.

MR. JOEL WEBER: I'm Joel Weber. I'm a Somerville resident. Sometimes when I go for a walk along Broadway near the bridge, I notice that the visibility is somewhat limited because of how high the bridge is above the surrounding area, and it's a problem on both sides of the bridge, which leaves me with the impress that perhaps at one time the road may have crossed the railroad tracks at grade and, when the time came for grade separation, the bridge was simply built above the tracks. I think that we might be better off looking at lowering the tracks and making that area level again.

I've seen comments in the draft report about ADA accessibility to the station from the bridge being a problem because of the grade on the bridge, and I think

I-001-064

I-001-064

The DEIR/EA and FEIR include conceptual Project designs. Designs for each station, the storage and maintenance facility, and the entire project alignment will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-001-065

this is really a problem with having not lowered the tracks. Even if you build a building next to the track so that people can get into the station from one side in a wheelchair, I'm concerned about access for people in wheelchairs going from one side of the tracks to the other. I think that lowering the tracks could improve accessibility across the tracks in our community. And so I think that we should look at lowering the tracks at Lowell Street, at Broadway, at Harvard Avenue lowering the tracks and putting the road above the tracks, and I'm not sure, you know, at the stations beyond that whether the tracks should also be lowered there. Thank you.

MS. NANCY FARRELL: Thank you.

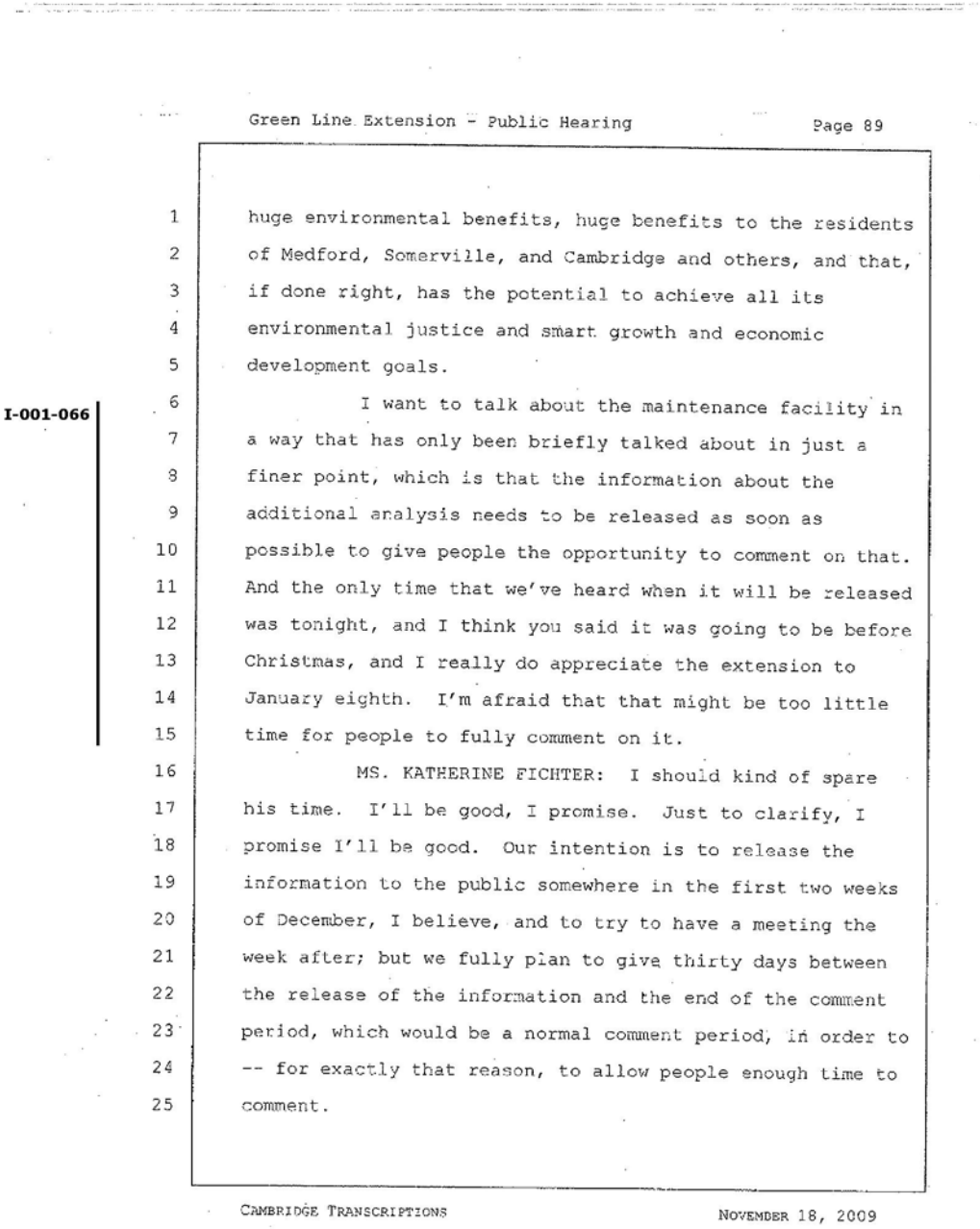
[Applause]

MS. NANCY FARRELL: Rafael Mares? And then we'll have Steve Mackey, Alyson Schultz, and Alan Greene.

MR. RAFAEL MARES: Good evening. My name is Rafael Mares. I'm a staff attorney at the Conservation Law Foundation and, while I will try to be brief, I learned in law school never to promise that. I'd like to start by thanking MassDOT for getting us to this crucial stage in the environmental review process. I don't want to lose track of the fact that this is a major milestone, and we appreciate that. And I also don't want to lose track of the fact that this is a great project that will provide

I-001-065

The conceptual track, system, and bridge designs presented in DEIR/EA Section 3.7 will be refined in the preliminary engineering phase of the Project. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.



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huge environmental benefits, huge benefits to the residents of Medford, Somerville, and Cambridge and others, and that, if done right, has the potential to achieve all its environmental justice and smart growth and economic development goals.

I-001-066

I want to talk about the maintenance facility in a way that has only been briefly talked about in just a finer point, which is that the information about the additional analysis needs to be released as soon as possible to give people the opportunity to comment on that. And the only time that we've heard when it will be released was tonight, and I think you said it was going to be before Christmas, and I really do appreciate the extension to January eighth. I'm afraid that that might be too little time for people to fully comment on it.

MS. KATHERINE FICHTER: I should kind of spare his time. I'll be good, I promise. Just to clarify, I promise I'll be good. Our intention is to release the information to the public somewhere in the first two weeks of December, I believe, and to try to have a meeting the week after; but we fully plan to give thirty days between the release of the information and the end of the comment period, which would be a normal comment period, in order to -- for exactly that reason, to allow people enough time to comment.

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I-001-066

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

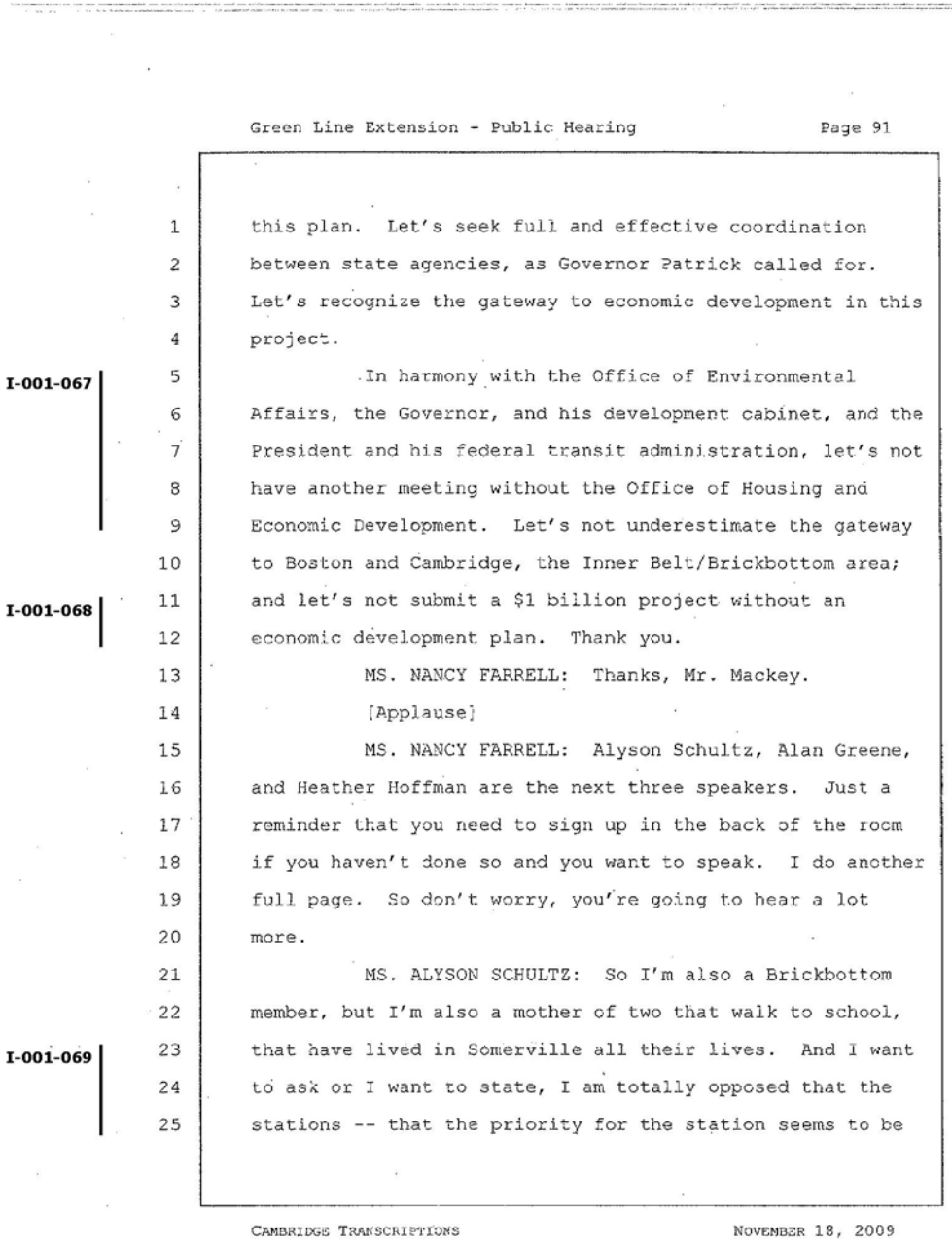
Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

MR. RAFAEL MARES: Great, I appreciate because you can obviously see that is the hot button issue that we have here. All right. Thank you very much.

MS. NANCY FARRELL: Thank you. Steve Mackey?

MR. STEVEN MACKEY: Good evening. Thank you. My name is Steven Mackey. I work for the Somerville Chamber of Commerce, a local membership association of 320 small business and enterprises, of which we count Brickbottom Artists Association as one. In 2006, the Massachusetts Secretary of Environmental Affairs required that transit-oriented development and land use be addressed in the plan for the Green Line Extension. A year later, in 2007, Governor Patrick established a cabinet department to promote economic development through, among other means, transit-oriented development and smart growth, stating, "The key to the Commonwealth's economic success is the full and effective coordination between state agencies."

Last week, President Obama's appointee Ray LaHood, the U.S. Secretary of Transportation, said, "We see transportation as a gateway to economic development and a better quality of life. To put that into action, DOT will listen more carefully to the state, regional, and community priorities." And added, "The kinds of priorities that small businesses help shape." In harmony with these leaders, let's really address development and land use in



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this plan. Let's seek full and effective coordination between state agencies, as Governor Patrick called for. Let's recognize the gateway to economic development in this project.

I-001-067

In harmony with the Office of Environmental Affairs, the Governor, and his development cabinet, and the President and his federal transit administration, let's not have another meeting without the Office of Housing and Economic Development. Let's not underestimate the gateway to Boston and Cambridge, the Inner Belt/Brickbottom area; and let's not submit a $1 billion project without an economic development plan. Thank you.

I-001-068

MS. NANCY FARRELL: Thanks, Mr. Mackey.

[Applause]

MS. NANCY FARRELL: Alyson Schultz, Alan Greene, and Heather Hoffman are the next three speakers. Just a reminder that you need to sign up in the back of the room if you haven't done so and you want to speak. I do another full page. So don't worry, you're going to hear a lot more.

MS. ALYSON SCHULTZ: So I'm also a Brickbottom member, but I'm also a mother of two that walk to school, that have lived in Somerville all their lives. And I want to ask or I want to state, I am totally opposed that the stations -- that the priority for the station seems to be

I-001-069

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I-001-067

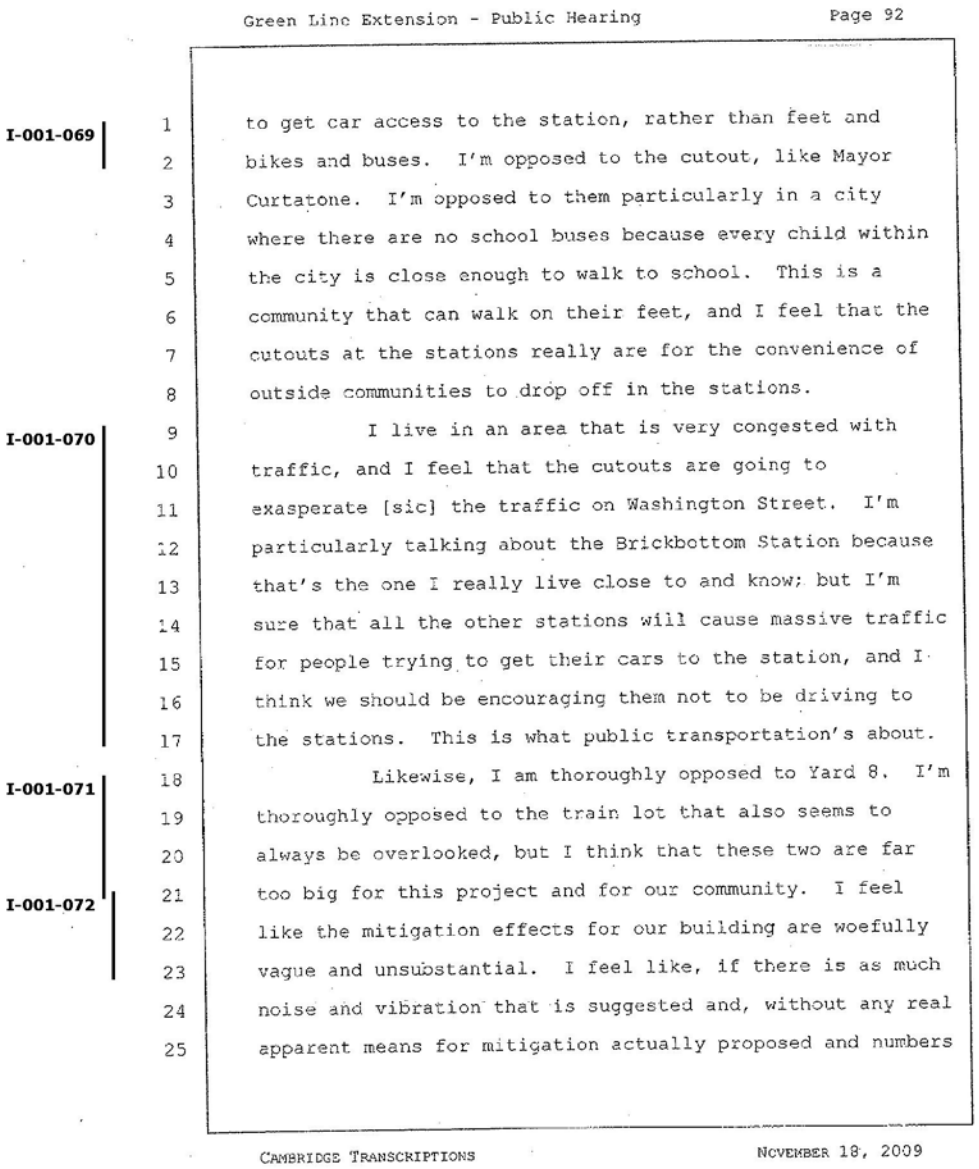
MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

I-001-068

Anticipated indirect and cumulative effects of the Project, including impacts on corridor transportation and traffic, growth, property values, land use, transit-oriented and economic development are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects. As stated in FEIR Section 6.4, MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. These workshops will offer an opportunity to discuss how facility design can influence indirect and cumulative effects. The stations have been designed to meet MBTA standards, as well as to be ADA-compliant.

I-001-069

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.



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I-001-069 to get car access to the station, rather than feet and bikes and buses. I'm opposed to the cutout, like Mayor Curtatone. I'm opposed to them particularly in a city where there are no school buses because every child within the city is close enough to walk to school. This is a community that can walk on their feet, and I feel that the cutouts at the stations really are for the convenience of outside communities to drop off in the stations.

I-001-070 I live in an area that is very congested with traffic, and I feel that the cutouts are going to exasperate [sic] the traffic on Washington Street. I'm particularly talking about the Brickbottom Station because that's the one I really live close to and know; but I'm sure that all the other stations will cause massive traffic for people trying to get their cars to the station, and I think we should be encouraging them not to be driving to the stations. This is what public transportation's about.

I-001-071 Likewise, I am thoroughly opposed to Yard 8. I'm thoroughly opposed to the train lot that also seems to always be overlooked, but I think that these two are far too big for this project and for our community. I feel

I-001-072 like the mitigation effects for our building are woefully vague and unsubstantial. I feel like, if there is as much noise and vibration that is suggested and, without any real apparent means for mitigation actually proposed and numbers

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I-001-070

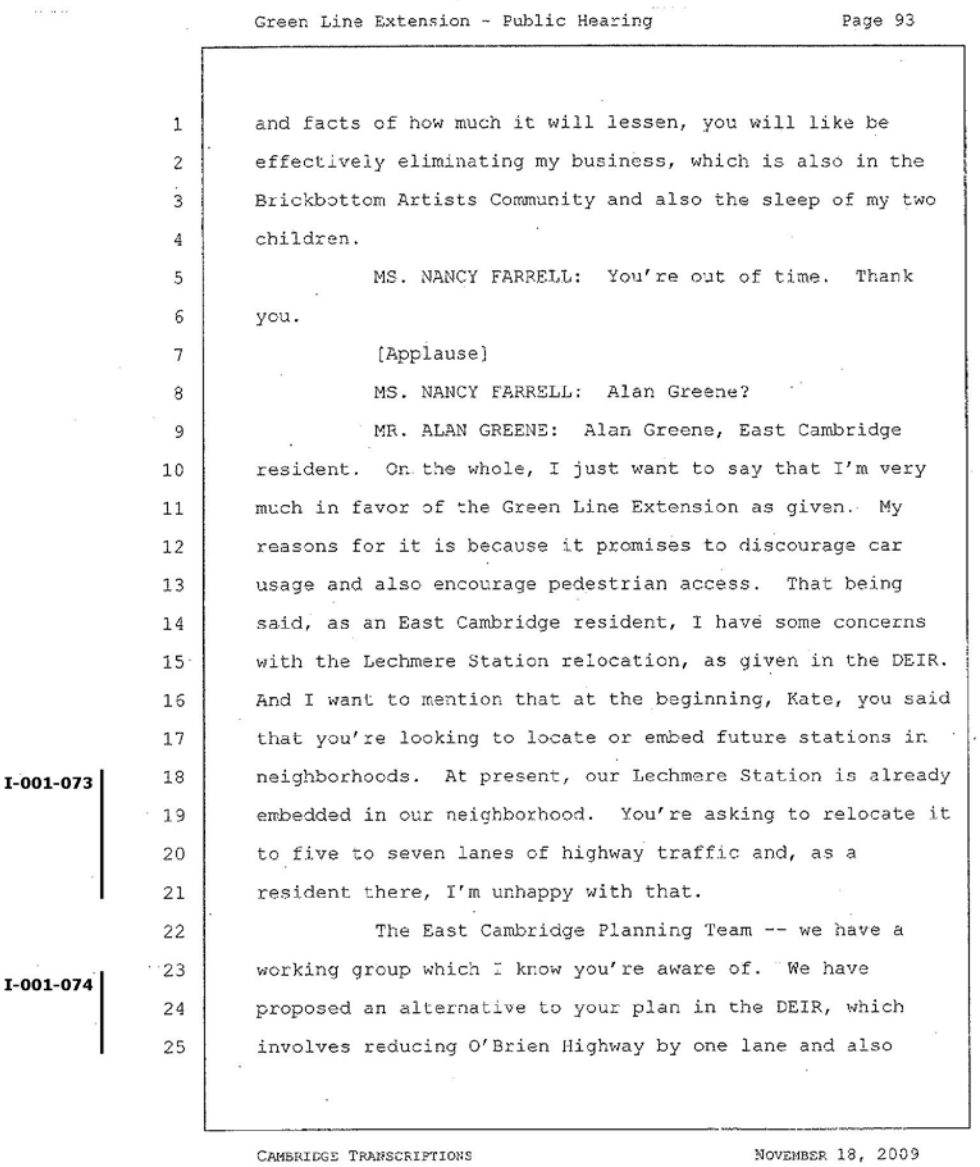
The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-001-071

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-072

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.



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and facts of how much it will lessen, you will like be effectively eliminating my business, which is also in the Brickbottom Artists Community and also the sleep of my two children.

MS. NANCY FARRELL: You're out of time. Thank you.

[Applause]

MS. NANCY FARRELL: Alan Greene?

MR. ALAN GREENE: Alan Greene, East Cambridge resident. On the whole, I just want to say that I'm very much in favor of the Green Line Extension as given. My reasons for it is because it promises to discourage car usage and also encourage pedestrian access. That being said, as an East Cambridge resident, I have some concerns with the Lechmere Station relocation, as given in the DEIR. And I want to mention that at the beginning, Kate, you said that you're looking to locate or embed future stations in neighborhoods. At present, our Lechmere Station is already embedded in our neighborhood. You're asking to relocate it to five to seven lanes of highway traffic and, as a resident there, I'm unhappy with that.

The East Cambridge Planning Team -- we have a working group which I know you're aware of. We have proposed an alternative to your plan in the DEIR, which involves reducing O'Brien Highway by one lane and also

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I-001-073

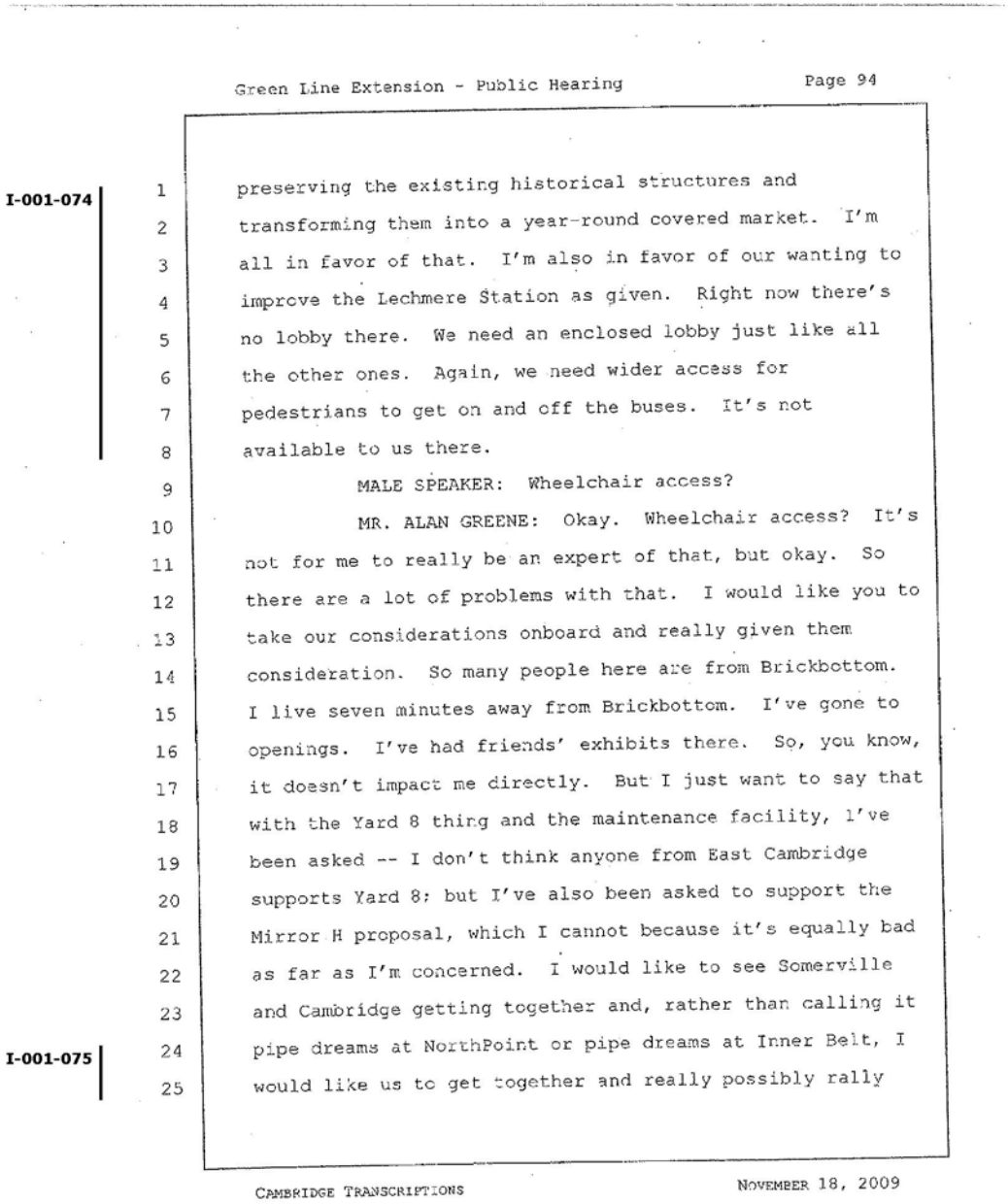
I-001-074

I-001-073

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-001-074

Please see response to Comment I-001-073.



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I-001-074

preserving the existing historical structures and transforming them into a year-round covered market. I'm all in favor of that. I'm also in favor of our wanting to improve the Lechmere Station as given. Right now there's no lobby there. We need an enclosed lobby just like all the other ones. Again, we need wider access for pedestrians to get on and off the buses. It's not available to us there.

MALE SPEAKER: Wheelchair access?

MR. ALAN GREENE: Okay. Wheelchair access? It's not for me to really be an expert of that, but okay. So there are a lot of problems with that. I would like you to take our considerations onboard and really given them consideration. So many people here are from Brickbottom. I live seven minutes away from Brickbottom. I've gone to openings. I've had friends' exhibits there. So, you know, it doesn't impact me directly. But I just want to say that with the Yard 8 thing and the maintenance facility, I've been asked -- I don't think anyone from East Cambridge supports Yard 8; but I've also been asked to support the Mirror H proposal, which I cannot because it's equally bad as far as I'm concerned. I would like to see Somerville and Cambridge getting together and, rather than calling it

I-001-075

pipe dreams at NorthPoint or pipe dreams at Inner Belt, I would like us to get together and really possibly rally

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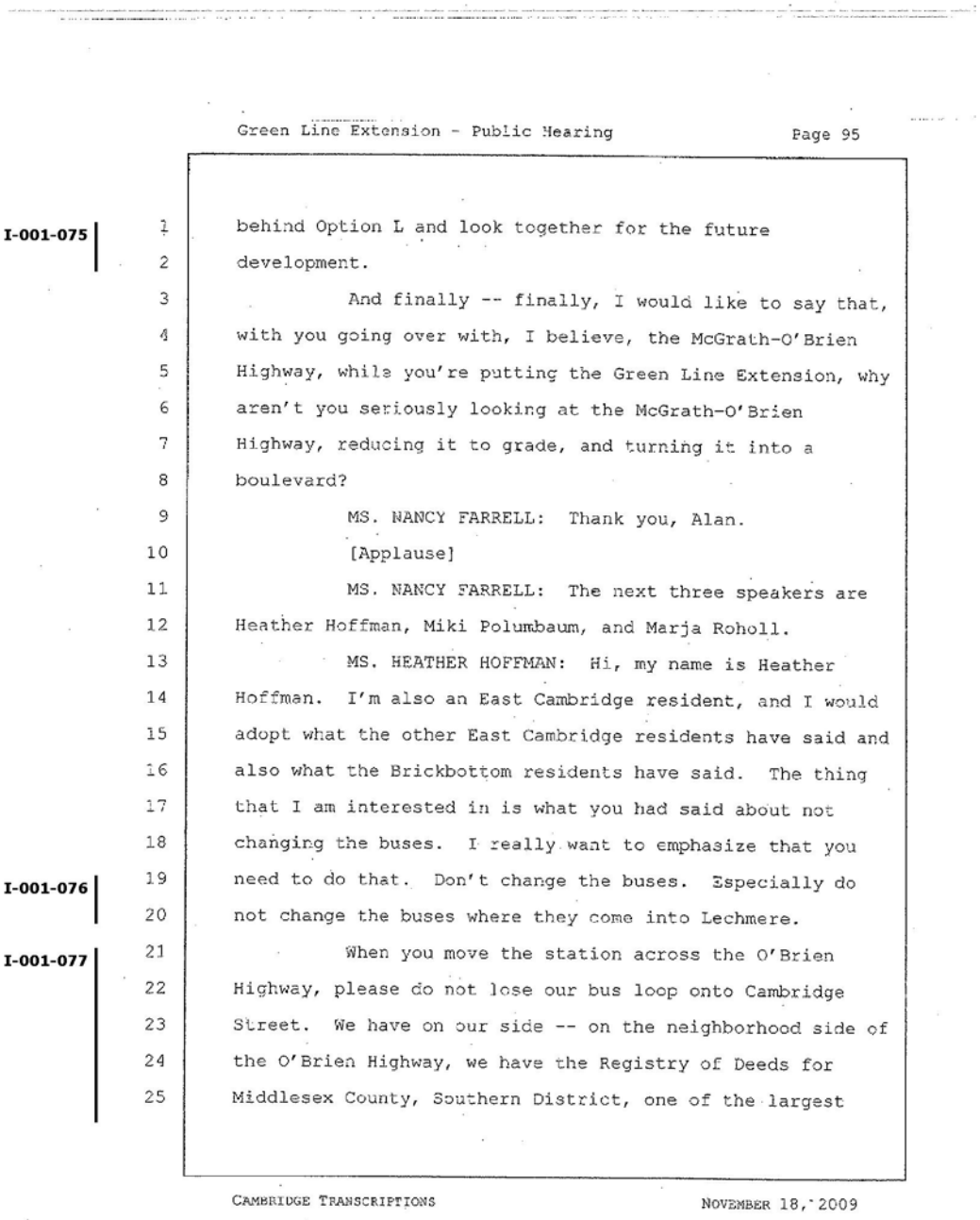
I-001-075

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.



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I-001-075

behind Option L and look together for the future development.

And finally -- finally, I would like to say that, with you going over with, I believe, the McGrath-O'Brien Highway, while you're putting the Green Line Extension, why aren't you seriously looking at the McGrath-O'Brien Highway, reducing it to grade, and turning it into a boulevard?

MS. NANCY FARRELL: Thank you, Alan.

[Applause]

MS. NANCY FARRELL: The next three speakers are Heather Hoffman, Miki Polumbaum, and Marja Roholl.

MS. HEATHER HOFFMAN: Hi, my name is Heather Hoffman. I'm also an East Cambridge resident, and I would adopt what the other East Cambridge residents have said and also what the Brickbottom residents have said. The thing that I am interested in is what you had said about not changing the buses. I really want to emphasize that you need to do that. Don't change the buses. Especially do not change the buses where they come into Lechmere.

I-001-076

I-001-077

When you move the station across the O'Brien Highway, please do not lose our bus loop onto Cambridge Street. We have on our side -- on the neighborhood side of the O'Brien Highway, we have the Registry of Deeds for Middlesex County, Southern District, one of the largest

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I-001-076

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-077

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Routes 80, 87 and 88 are expected to enter the station directly from O'Brien Highway via Water Street and not travel to Cambridge Street. The path for Route 69 can remain on Cambridge Street in East Cambridge, with inbound service along North First Street, O'Brian Highway, and Water Street.

I-001-077

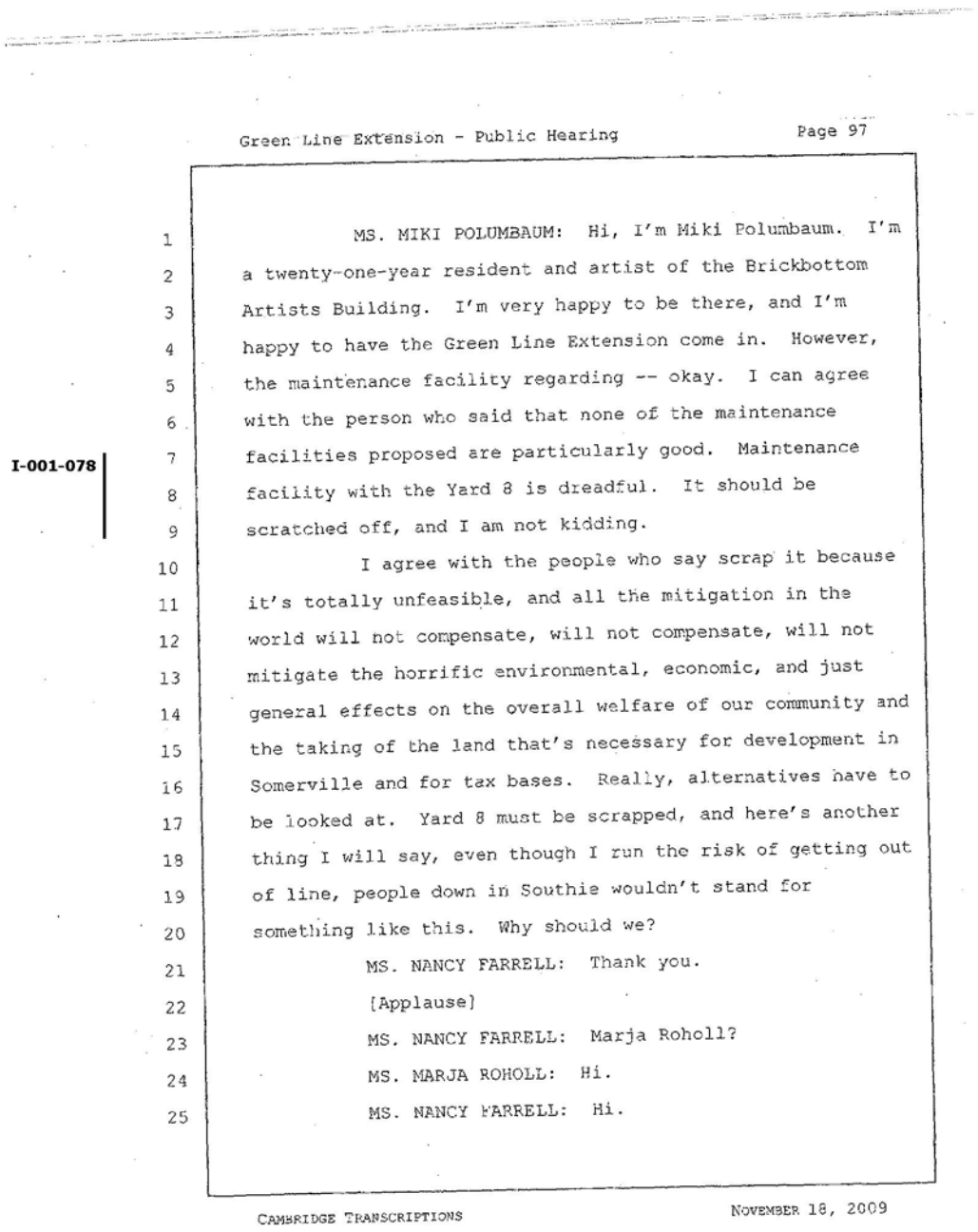
registries of deeds in the country. We have the Middlesex County Probate Court where tons of people come for divorces, for dealing with estates, conservatorships, adoptions, all kinds of things. We have the Cambridge Galleria Mall. All of these things would -- it would be silly to have all of these users have to cross the O'Brien Highway if they're coming by bus. So please do not lose that really important access for our neighborhood.

I would also like to suggest that, in keeping with the idea of access by the buses, that you have the stop at Third and Cambridge Street and the stop at First and Cambridge Streets be available for people to get on for free to get across the O'Brien Highway to the new station. I don't think that this would set a bad precedent. I can't think of anywhere else in the MBTA system that you're likely to have something like this, where you're moving a station from a neighborhood across a multi-lane highway. That way, even though there will still be plenty of need to mitigate the conditions for pedestrians crossing the highway, that's one way that you can make it a whole lot safer for people. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Miki? Sorry I murdered your name there.



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MS. MIKI POLUMBAUM: Hi, I'm Miki Polumbaum. I'm a twenty-one-year resident and artist of the Brickbottom Artists Building. I'm very happy to be there, and I'm happy to have the Green Line Extension come in. However, the maintenance facility regarding -- okay. I can agree with the person who said that none of the maintenance facilities proposed are particularly good. Maintenance facility with the Yard 8 is dreadful. It should be scratched off, and I am not kidding.

I-001-078

I agree with the people who say scrap it because it's totally unfeasible, and all the mitigation in the world will not compensate, will not compensate, will not mitigate the horrific environmental, economic, and just general effects on the overall welfare of our community and the taking of the land that's necessary for development in Somerville and for tax bases. Really, alternatives have to be looked at. Yard 8 must be scrapped, and here's another thing I will say, even though I run the risk of getting out of line, people down in Southie wouldn't stand for something like this. Why should we?

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Marja Roholl?

MS. MARJA ROHOLL: Hi.

MS. NANCY FARRELL: Hi.

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I-001-078

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

MS. MARJA ROHOLL: My name is Marja Roholl, also another resident from Brickbottom, and I thank you for including Mirror Scheme H and Option L as alternative sites for the maintenance facility and the storage yard. As you know, Mirror H Scheme has a strong preference of the City of Somerville, the Brickbottom residents, and other stakeholders, for reasons that have been expressed already by other speakers.

My concern -- and it's also being mentioned and that's probably happening why you're a little bit one of the later speakers -- is the decision process by itself. It seems to me that the process is being rushed where it comes to the alternative sites. A complete analysis of the alternative sites has not yet been made public for input and discussions, although being promised to be released a couple of weeks ago, and yet we are supposed to give our inputs before January eighth, maybe now January fifteenth, but still that is a really short period.

I mean, thirty days that's what you're referring to, and that's including the Christmas period, is a really very short time to respond where people jobs and their own businesses to do, and it took you apparently years to work it out to come up with the analysis. So I think that a little bit more time would reflect that you are really serious about taking the alternatives into considerations

I-001-079

I-001-079

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-001-080

because the lifelong implications of the choices that are going to be made for the many people in Brickbottom and the future of Somerville's economy are too serious to be treated as afterthoughts. Please take the time to discuss with the communities the benefits of Mirror Plan H and Option L. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: The next three speakers are Pauline Lim, Ellen Band, and Elisabeth Bayle.

MS. PAULINE LIM: Hi, I'm Pauline Lim, and I'm an artist and I live at Brickbottom, and I've been there since 1989. I'm also a bicycle commuter. I go every day through NorthPoint, and it's a wonderful commute because it's absolutely deserted. It's my playground because there are no residents. I practice rollerblading there and feel free to fall down and not feel like anyone's going to run over me because it's like a ghost town. I also run across the Charlestown Bridge, and I look down and see the giant, huge wasteland where there could be many other maintenance facilities, rather than the one right outside people's bedroom windows.

I also, because I'm an MGH resident, I sometimes look at the window and say, "Oh, MGH Somerville is right there," and I wish I could work there because it would be

I-001-080

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

like a two-minute commute, except for that there's this impassable railroad track right in the way. And I used to say, "Oh, it'd be so easy to go to the grocery store, it's right there," but there's this other railroad track, and it makes you have to go many miles out of your way to get somewhere that you can see, you could throw a stone to.

Yard 8, everybody says it, I wrote letters. They acted like, "Oh, no, Yard 8 is the only way, sorry." I got these letters back. They never said that there was an alternative, and now they're saying there's an alternative. So who's the rich person who has all the influence, and why don't they listen to all these people? Are we just too small? I mean, there's enough of us, but I guess we're just not very powerful. What's up? That's terrible.

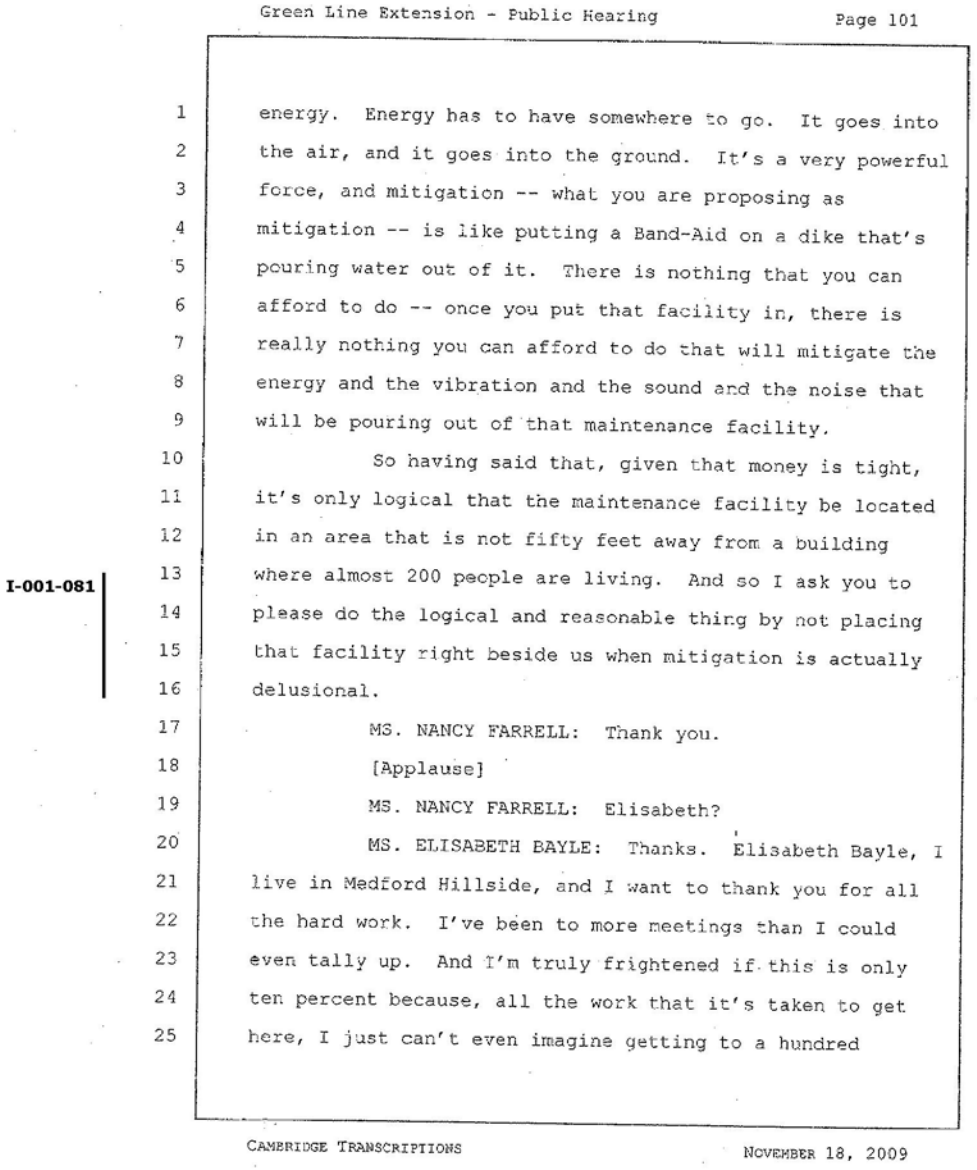
MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Ellen Band, Elisabeth Bayle.

MS. ELLEN BAND: Hi, I'm Ellen Band. I also live at Brickbottom, and I want to say, first, that I am a lifelong urban dweller and very much in favor of public transit. I'm also a composer, a musician, and a sound artist, and I have worked my whole life with sound and vibration. So I want to address the issue of mitigation in Yard 8. I am completely opposed to Yard 8.

Sound, noise, and vibration are all forms of



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energy. Energy has to have somewhere to go. It goes into the air, and it goes into the ground. It's a very powerful force, and mitigation -- what you are proposing as mitigation -- is like putting a Band-Aid on a dike that's pouring water out of it. There is nothing that you can afford to do -- once you put that facility in, there is really nothing you can afford to do that will mitigate the energy and the vibration and the sound and the noise that will be pouring out of that maintenance facility.

So having said that, given that money is tight, it's only logical that the maintenance facility be located in an area that is not fifty feet away from a building where almost 200 people are living. And so I ask you to please do the logical and reasonable thing by not placing that facility right beside us when mitigation is actually delusional.

I-001-081

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Elisabeth?

MS. ELISABETH BAYLE: Thanks. Elisabeth Bayle, I live in Medford Hillside, and I want to thank you for all the hard work. I've been to more meetings than I could even tally up. And I'm truly frightened if this is only ten percent because, all the work that it's taken to get here, I just can't even imagine getting to a hundred

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I-001-081

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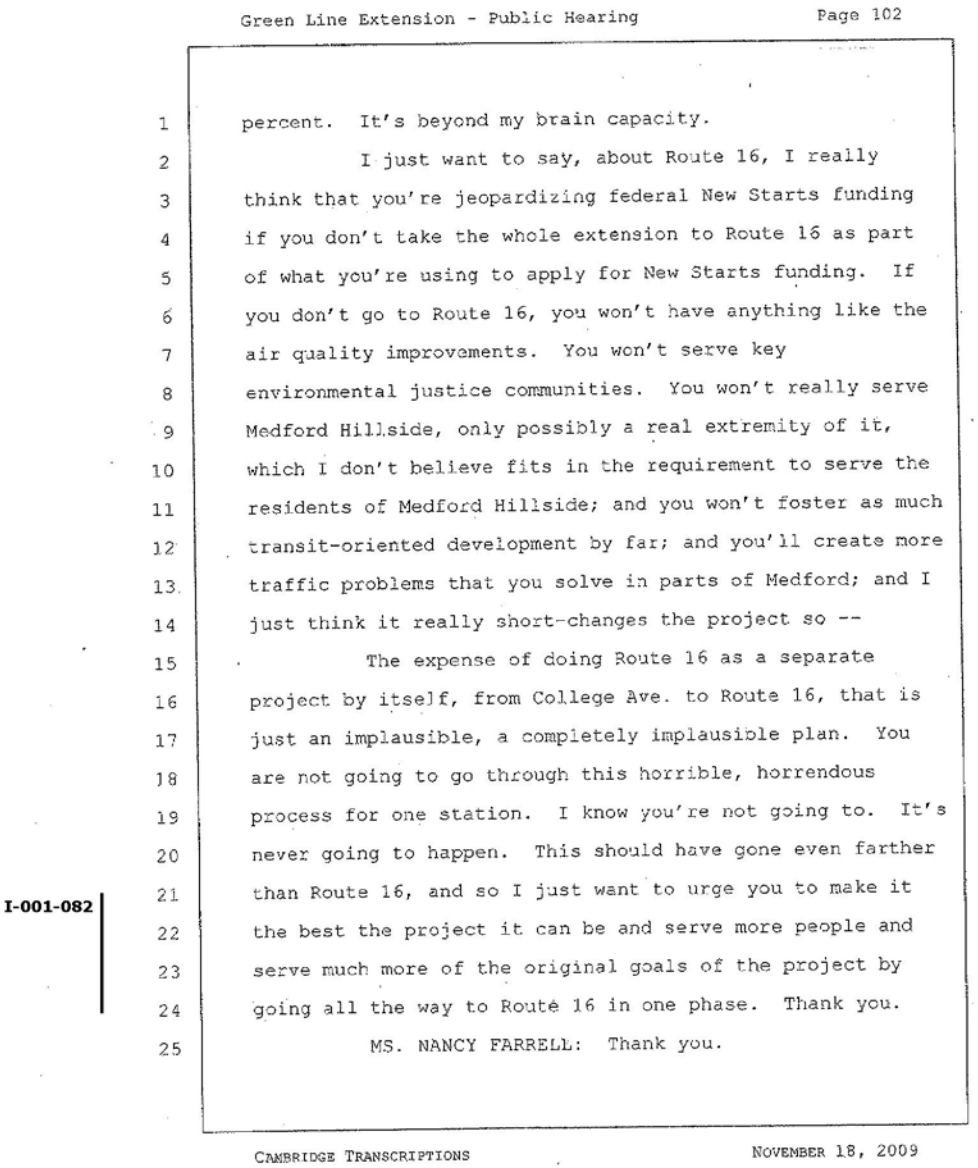

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percent. It's beyond my brain capacity.

I just want to say, about Route 16, I really think that you're jeopardizing federal New Starts funding if you don't take the whole extension to Route 16 as part of what you're using to apply for New Starts funding. If you don't go to Route 16, you won't have anything like the air quality improvements. You won't serve key environmental justice communities. You won't really serve Medford Hillside, only possibly a real extremity of it, which I don't believe fits in the requirement to serve the residents of Medford Hillside; and you won't foster as much transit-oriented development by far; and you'll create more traffic problems that you solve in parts of Medford; and I just think it really short-changes the project so --

The expense of doing Route 16 as a separate project by itself, from College Ave. to Route 16, that is just an implausible, a completely implausible plan. You are not going to go through this horrible, horrendous process for one station. I know you're not going to. It's never going to happen. This should have gone even farther than Route 16, and so I just want to urge you to make it the best the project it can be and serve more people and serve much more of the original goals of the project by going all the way to Route 16 in one phase. Thank you.

MS. NANCY FARRELL: Thank you.

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I-001-082

I-001-082

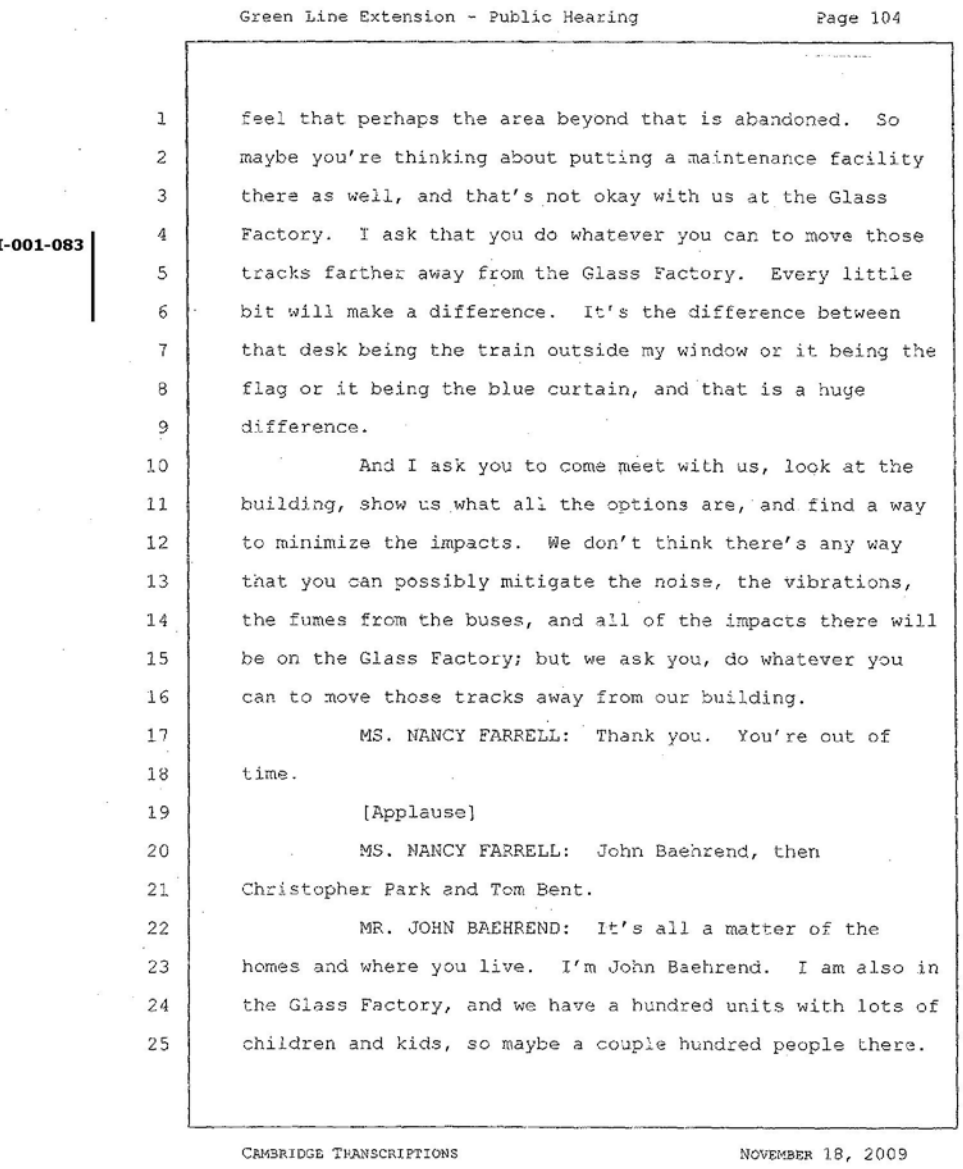
Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

[Applause]

MS. NANCY FARRELL: The next three speakers are Ivy Turner, John Baehrend, and Christopher Park.

MS. IVY TURNER: Hi, I'm Ivy Turner, Glass Factory resident. We actually exist. NorthPoint exists, we live there. I'm also the organizer of the newly formed Glass Factor Action Committee. We are one of the most severely impacted buildings by this project. First, we will have tracks running the entire length of our building, coming down what used to be our green space, which is a narrow space -- so narrow that, from my window, I can almost reach out and touch the tracks. I'm at the corner closest to the tracks, possibly as close as that desk. I don't know exactly how close because nowhere you do state what the height or the distance will be. When you came and met with us, we couldn't get that information. We still don't have it. So we don't know exactly how bad it will be or if you'll completely cut off the light to the entire second floor of the building, or will it be the third floor or both floors or exactly what it will be.

Beyond that, we get to look out at 250 parking spaces. I don't really understand that. And we also get buses and fumes. If we look to the right though, we get to see what is possibly the ugliest station design I have ever seen. So it just goes from bad to worse, and now people



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I-001-083

feel that perhaps the area beyond that is abandoned. So maybe you're thinking about putting a maintenance facility there as well, and that's not okay with us at the Glass Factory. I ask that you do whatever you can to move those tracks farther away from the Glass Factory. Every little bit will make a difference. It's the difference between that desk being the train outside my window or it being the flag or it being the blue curtain, and that is a huge difference.

And I ask you to come meet with us, look at the building, show us what all the options are, and find a way to minimize the impacts. We don't think there's any way that you can possibly mitigate the noise, the vibrations, the fumes from the buses, and all of the impacts there will be on the Glass Factory; but we ask you, do whatever you can to move those tracks away from our building.

MS. NANCY FARRELL: Thank you. You're out of time.

[Applause]

MS. NANCY FARRELL: John Baehrend, then Christopher Park and Tom Bent.

MR. JOHN BAEHREND: It's all a matter of the homes and where you live. I'm John Baehrend. I am also in the Glass Factory, and we have a hundred units with lots of children and kids, so maybe a couple hundred people there.

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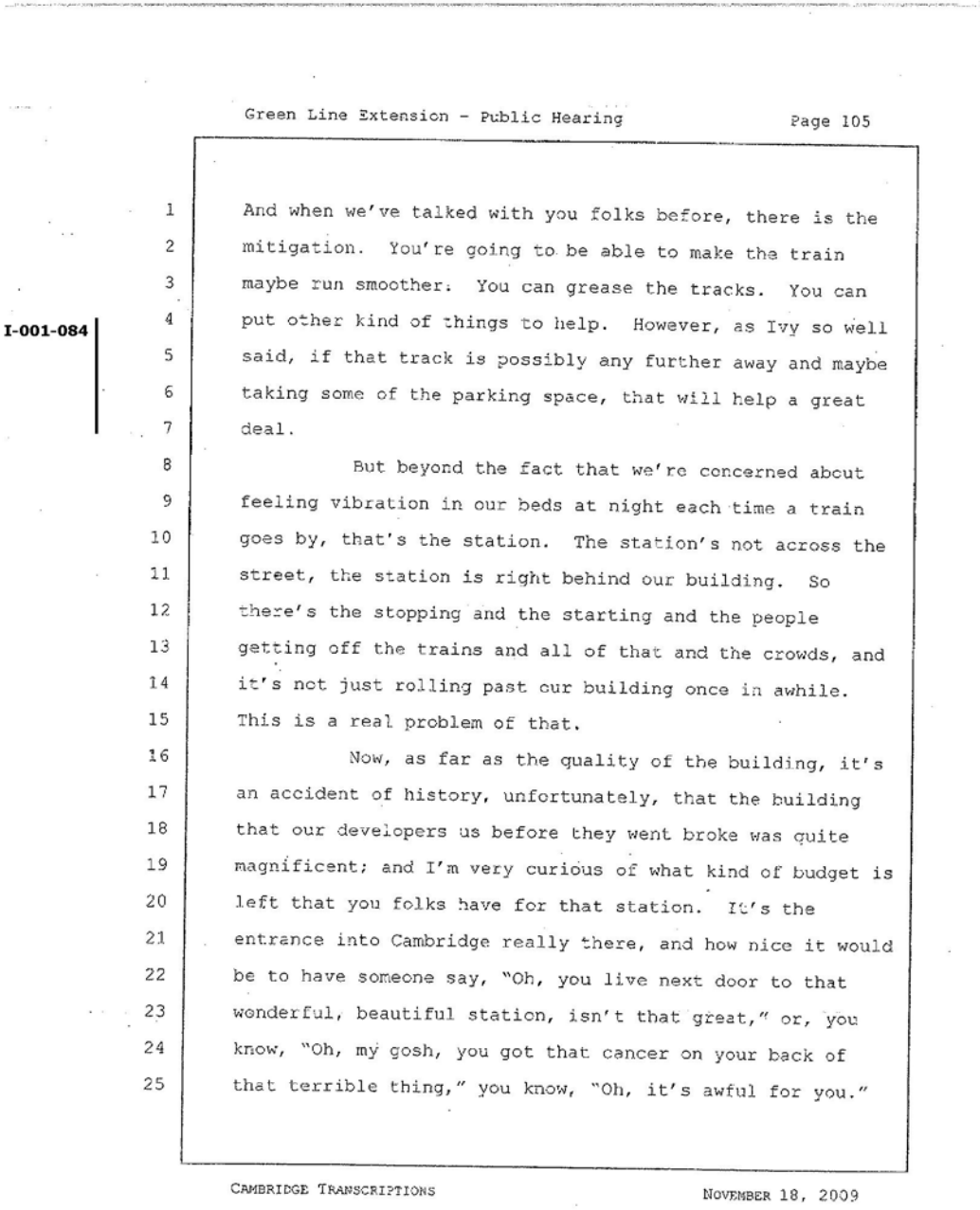
I-001-083

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.



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I-001-084

And when we've talked with you folks before, there is the mitigation. You're going to be able to make the train maybe run smoother. You can grease the tracks. You can put other kind of things to help. However, as Ivy so well said, if that track is possibly any further away and maybe taking some of the parking space, that will help a great deal.

But beyond the fact that we're concerned about feeling vibration in our beds at night each time a train goes by, that's the station. The station's not across the street, the station is right behind our building. So there's the stopping and the starting and the people getting off the trains and all of that and the crowds, and it's not just rolling past our building once in awhile. This is a real problem of that.

Now, as far as the quality of the building, it's an accident of history, unfortunately, that the building that our developers us before they went broke was quite magnificent; and I'm very curious of what kind of budget is left that you folks have for that station. It's the entrance into Cambridge really there, and how nice it would be to have someone say, "Oh, you live next door to that wonderful, beautiful station, isn't that great," or, you know, "Oh, my gosh, you got that cancer on your back of that terrible thing," you know, "Oh, it's awful for you."

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I-001-084

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

And, of course, it's not just how we feel about it. We can't sell our units, and our life savings are in there. Retired folks and young people who are hoping to get a leg up are really, really hurting. A little bit of -- particularly, as Ivy said, being able to move that track back and to have something that we can be proud of. Have a competition like they did at the Charles MGH. Thank you very much.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Christopher Park, Tom Bent, and then Brian Sylvain.

MR. CHRISTOPHER PARK: Hello, Kate. My name is Christopher, a resident at the Glass Factory building, as well as a trustee there; and I recognize you, Kate, from several of our correspondences and many of the people who have attended here. What's new to me is the fact that, from what I understand, this will be the final draft of the DEIR, which I find a little bit displeasing simply because there are a number of things I find, unfortunately, incomplete.

The DEIR for the Glass Factory specifically states that we are assigned a "severe" noise impact from the project, and that's good. I like the fact that you recognize that, well, the trains are going to effectively

be about fifteen or twenty feet away from our building, but what they don't really address is the fact that the noise-absorbing walls that are outlined in the pages can't be actually installed on our property simply because the tracks are going to be close. So what you suggest or what the DEIR suggests is sound insulation and that is something that -- you know, unfortunately, they assigned an estimated budget, but I don't understand how you could possibly assign an estimated budget with only ten percent design of the actual station, as well as not knowing information about our building. So it's a little bit puzzling for me to really understand where this budget is coming from, whether it's accurate, how much will it be allocated and will, in fact, we actually receive this budget.

I-001-085

In addition, strangely enough, the report also lists that our building will have no projected vibration impact. I can't possibly see that being the truth simply because, again as Ivy and John stated, we're only a few meters from the tracks. So, again, I'm just wondering why this is the case and why there is no property-related vibration mitigation budget right now in the DEIR report. It's only the mitigations related to the track construction.

MS. NANCY FARRELL: Mr. Park, you're out of time.

MR. CHRISTOPHER PARK: Okay. And finally, just

I-001-085

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

one quick final point here, you know, we have 10,900 commuters to access Lechmere in 2030. It's by far the most commuters on a daily basis. Let's try to make this the best, beautiful station as we possibly can. The Lechmere station to us is what Yard 8 is to the Brickbottom. So let's try to keep that in mind. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Tom Bent, Brian Sylvain, and Max Malaret.

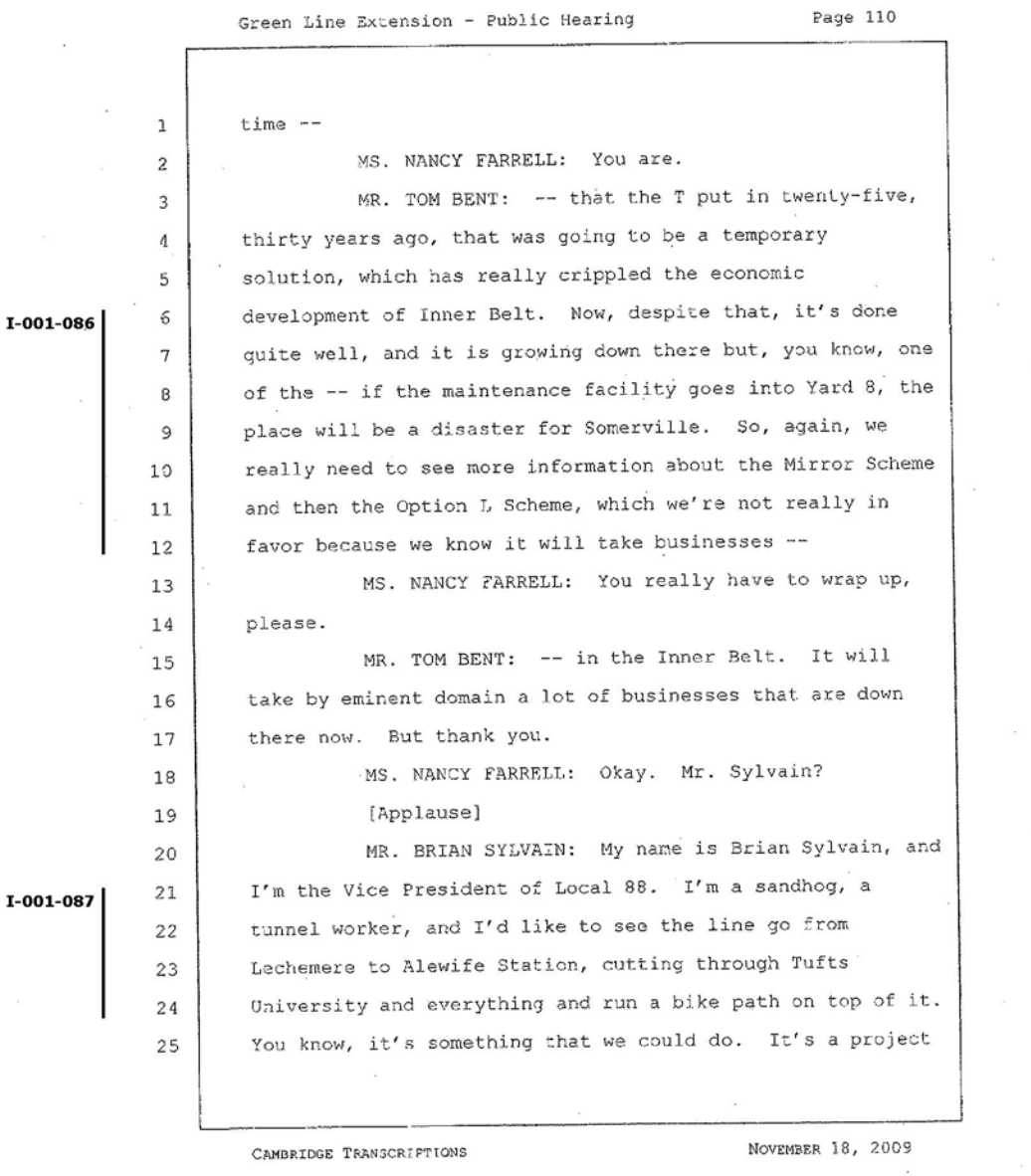
MR. TOM BENT: Hello. I wanted to thank you for tonight and for all the efforts that you put in. I'm involved in it somewhat. I'm Somerville's representative on the Boston Metropolitan Planning Organization. So I know what you're going through, and I appreciate, you know, all you've done to this point.

But my name is Tom Bent. I've lived in Somerville all my life, and my business is pretty close to ground zero down at the Inner Belt. And one of the things that struck me was, last night I was in another three-hour meeting, a citywide planning meeting, with a lot of residents in the city. And one of the themes that kept coming up over and over was the, you know, how do we get Somerville off being one of the highest recipients of state aid. And, you know, one of the conversations that we had

with some of the people at our table was that the reason why we're in this situation is because of what the state has done to us for the past hundred years, you know, with what they've done to us with 93, Route 28, you know, every commuter line that goes into Boston goes through Somerville but doesn't stop in Somerville. You know, we finally got a Red Line stop, but that was mainly because Arlington didn't want it which I'm sure they, you know, are sorry about now. So for a long time Somerville has taken the brunt of all the transportation decisions, good and bad, throughout the state.

We're also, as you know, the host of the Boston Engine Terminal, and so what we were looking at was, you know, what are the last frontiers of Somerville for economic development; and one is Assembly Square, which we thank the Governor and Congressman Capuano and Senator Kerry for stimulus money and for being behind the extension of the Orange Line station. But then comes Boynton Yards, which is down in Union Square which will be -- you know, hopefully, it'll be a plus with the spur going in. But we have the Inner Belt, which is one of the largest sections in Somerville, and what we're worried about down there is the loss of economic development, you know, obviously.

We have the issue with the temporary overpass that was put in, the tubes -- you know, I'm running out of



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time --

MS. NANCY FARRELL: You are.

MR. TOM BENT: -- that the T put in twenty-five, thirty years ago, that was going to be a temporary solution, which has really crippled the economic development of Inner Belt. Now, despite that, it's done quite well, and it is growing down there but, you know, one of the -- if the maintenance facility goes into Yard 8, the place will be a disaster for Somerville. So, again, we really need to see more information about the Mirror Scheme and then the Option L Scheme, which we're not really in favor because we know it will take businesses --

MS. NANCY FARRELL: You really have to wrap up, please.

MR. TOM BENT: -- in the Inner Belt. It will take by eminent domain a lot of businesses that are down there now. But thank you.

MS. NANCY FARRELL: Okay. Mr. Sylvain?

[Applause]

MR. BRIAN SYLVAIN: My name is Brian Sylvain, and I'm the Vice President of Local 88. I'm a sandhog, a tunnel worker, and I'd like to see the line go from Lechemere to Alewife Station, cutting through Tufts University and everything and run a bike path on top of it. You know, it's something that we could do. It's a project

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I-001-086

I-001-087

I-001-086

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-087

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

that was on Southie last year. It was a two-mile tunnel. We did it in nine months. It's as dry as this room we're in. It's not -- we did very little on the big dig, just some of the dangerous stuff and some of the stuff that other people weren't qualified to do.

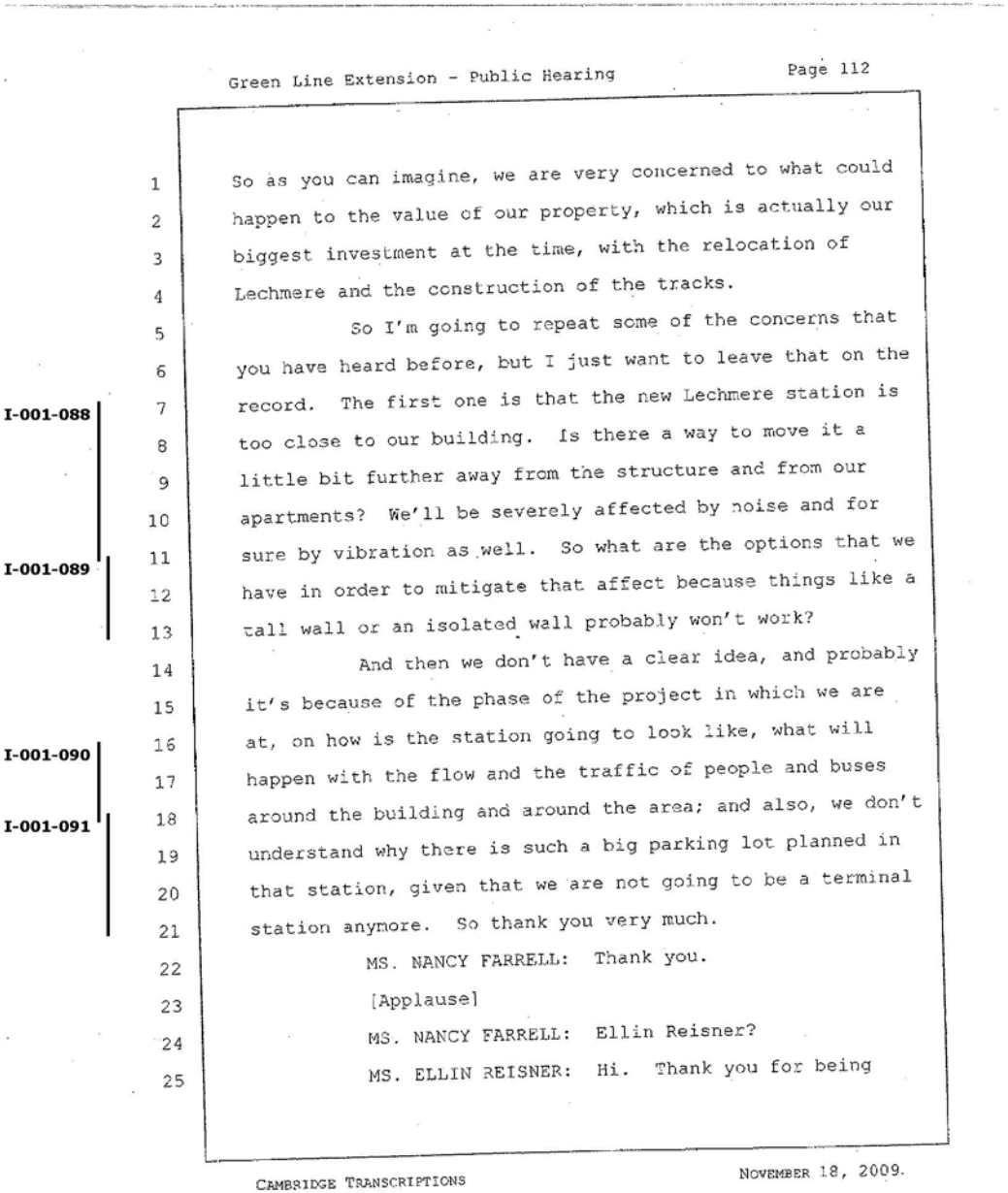
Currently, I work in East Boston, and I'm installing 48-inch short tunnel with a small tunnel boring machine; and it's a two-mile project, and we've got a mile done. We started in April. So I think that tunnel boring is the way to go. It's an electric powered device. There's no diesel, there's no excavators, there's no pile-driving. We also do caissons, and the gentleman that lives at the Brickbottom that was worried about the pile-driving, I think that you guys need to look at caissons. It's a drilled-shaft method with an auger. It's also what we do. We also do test boring, geotechnical work. So it's -- you know, let's do it right. That's all I have.

MS. NANCY FARRELL: Thank you, sir.

[Applause]

MS. NANCY FARRELL: The next three speakers are Max Malaret, Ellen Reisner, and Nicholas Watson.

MR. MAX MALARET: Good night. My name is Max Malaret. I'm a resident the Glass Factory building. I was renting until two months ago when my wife and I decided to buy an apartment there. We have a six-month-old daughter.



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So as you can imagine, we are very concerned to what could happen to the value of our property, which is actually our biggest investment at the time, with the relocation of Lechmere and the construction of the tracks.

So I'm going to repeat some of the concerns that you have heard before, but I just want to leave that on the record. The first one is that the new Lechmere station is too close to our building. Is there a way to move it a little bit further away from the structure and from our apartments? We'll be severely affected by noise and for sure by vibration as well. So what are the options that we have in order to mitigate that affect because things like a tall wall or an isolated wall probably won't work?

And then we don't have a clear idea, and probably it's because of the phase of the project in which we are at, on how is the station going to look like, what will happen with the flow and the traffic of people and buses around the building and around the area; and also, we don't understand why there is such a big parking lot planned in that station, given that we are not going to be a terminal station anymore. So thank you very much.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Ellin Reisner?

MS. ELLIN REISNER: Hi. Thank you for being

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I-001-088

I-001-089

I-001-090

I-001-091

I-001-088

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-001-089

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-001-090

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-001-091

Please see response to Comment I-001-090.

here, and I want to commend you for all the hard work that's been done. We're very excited about the Green Line coming, but we are concerned about the many aspects of the environmental review. Now, I'm going to limit my comments because most of them I will put in writing. But what I want to really focus on, something that has only been talked about a little bit, is what the role of the community is going to be in the next phases.

I-001-092

As a member of the Advisory Committee, I think it's really, really important that we work with MassDOT to come up with a way to do the public involvement collaboratively so that we have an oversight group, as we've had, but also at the neighborhood level with the people who are going to be most impacted by the construction and also by the station designs. I really think it's important. I think someone mentioned the need to bring people in who have not been part of the process, who don't speak English. I would like to really work with MassDOT, and I know other members of STEP and the City really want to do this; and I think, if we can do that together, that would be great.

I-001-093

The other recommendation that I want to make is that, when they built the Red Line station in Davis Square, there was a field office for the MBTA there. And I think it's really going to be critical to have a field office in

I-001-092

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-093

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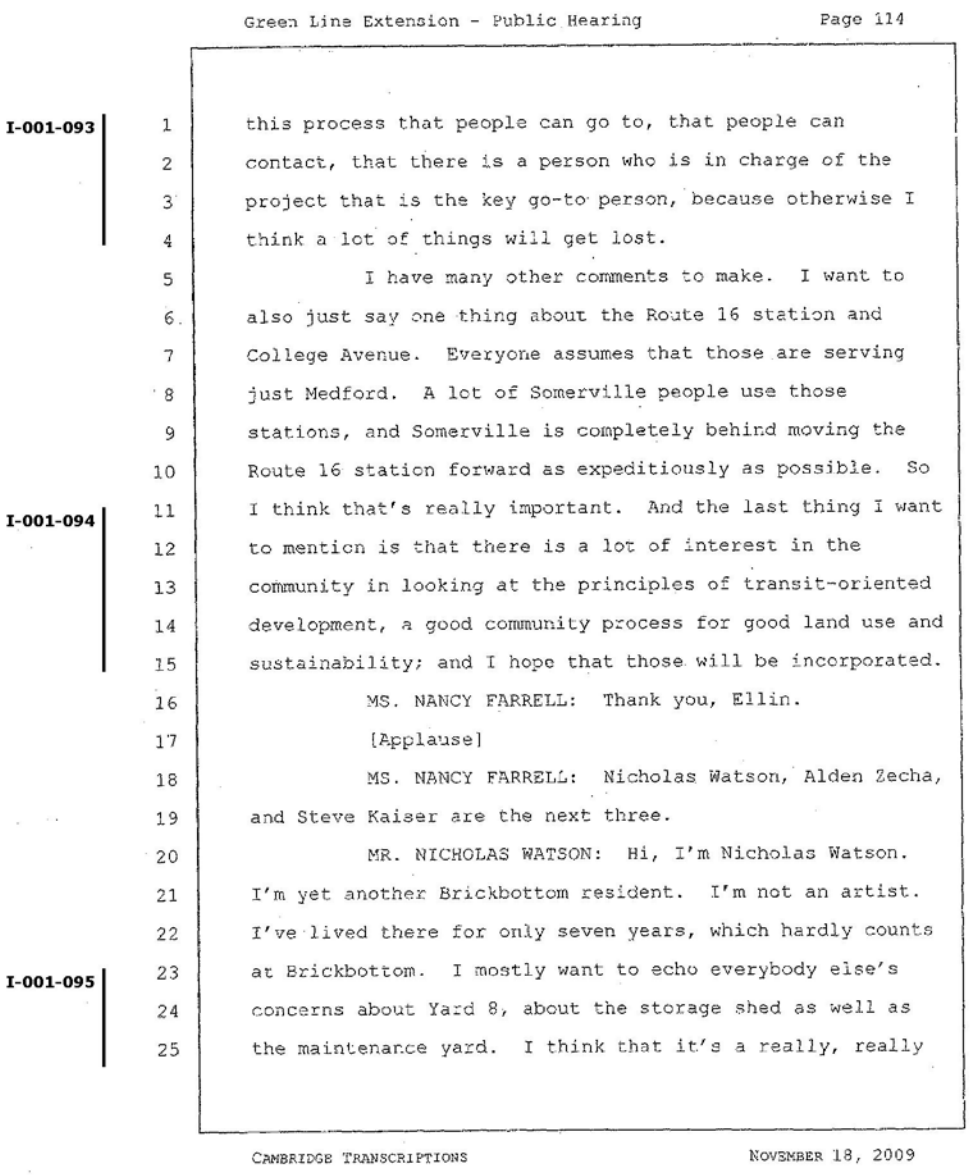

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this process that people can go to, that people can contact, that there is a person who is in charge of the project that is the key go-to person, because otherwise I think a lot of things will get lost.

I have many other comments to make. I want to also just say one thing about the Route 16 station and College Avenue. Everyone assumes that those are serving just Medford. A lot of Somerville people use those stations, and Somerville is completely behind moving the Route 16 station forward as expeditiously as possible. So I think that's really important. And the last thing I want to mention is that there is a lot of interest in the community in looking at the principles of transit-oriented development, a good community process for good land use and sustainability; and I hope that those will be incorporated.

MS. NANCY FARRELL: Thank you, Ellin.

[Applause]

MS. NANCY FARRELL: Nicholas Watson, Alden Zecha, and Steve Kaiser are the next three.

MR. NICHOLAS WATSON: Hi, I'm Nicholas Watson. I'm yet another Brickbottom resident. I'm not an artist. I've lived there for only seven years, which hardly counts at Brickbottom. I mostly want to echo everybody else's concerns about Yard 8, about the storage shed as well as the maintenance yard. I think that it's a really, really

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Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-001-095

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-095

bad idea from the point of view of the 220 people. One building, this is an environmental impact on 220 people.

But also, having only lived around where I do for seven years, I've watched the neighborhood go up. I've watched Union Square go up. When the Green Line was proposed, and I support it thoroughly, the idea that Union Square would be one of the great beneficiaries of this was very, very exciting to me. We're actually part of the Union Square community. We stand to benefit from that as well. If you just look at the map of the area, what the yard is -- it's a simply stupid idea. There's no way that it cuts -- it doesn't just cut off -- it cuts Union Square off from the whole of the east of Somerville as well. So I can't understand how this is being contemplated.

I think there's a problem of trust at this point in how we're going to move forward on this, but I think we have to move forward very, very slowly and consider things far more carefully. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Alden Zecha?

MR. ALDEN ZECHA: Good evening. My name is Alden Zecha. I happen to be a resident at Brickbottom as well, but I'm actually here to speak more in a professional capacity. In my professional capacity, I operate a

consulting business that focus specifically on financial decision-making for large corporations. In that capacity, I'm extremely excited to see the Green Line moving forward because I think the economic development potential for expansion of public transport is incredible for this area, and it will benefit both Somerville, Medford, and communities well beyond that.

I was also extremely excited to see specific points that Kate brought up in her presentation earlier tonight, and I'd, in fact, like to quote and repeat some of those points in order to make sure that they're clearly understood by the audience as large as well as yourselves. Kate specifically cited a few items. One of the items she said was, one of the five major reasons that we are extending the Green Line is to "provide opportunities for economic development." In addition, she cited that one of the three bottom line points is that "financial considerations influence project decision-making." And then, finally, in a passing comment not actually on the screen, Kate happened to acknowledge that the Mirror Scheme H "does not block economic development," and implies through that that the Yard 8 decision or the Yard 8 location would block economic development, which I personally do happen to agree with from a financial perspective.

Keeping those three ideas in mind taken directly from Kate's presentation earlier tonight, as well as DOT's own stated analyses that they've published and are publicly available, that say that the Yard 8 location will cost more to the tune of somewhere between three and fifteen million dollars under current estimates and, with historic hindsight on most government transportation projects indicating that cost overruns are a factor, we should keep that in mind. I would advocate that financial considerations be taken into account in order to look at the decision as to where to site both the maintenance facility and the storage yard.

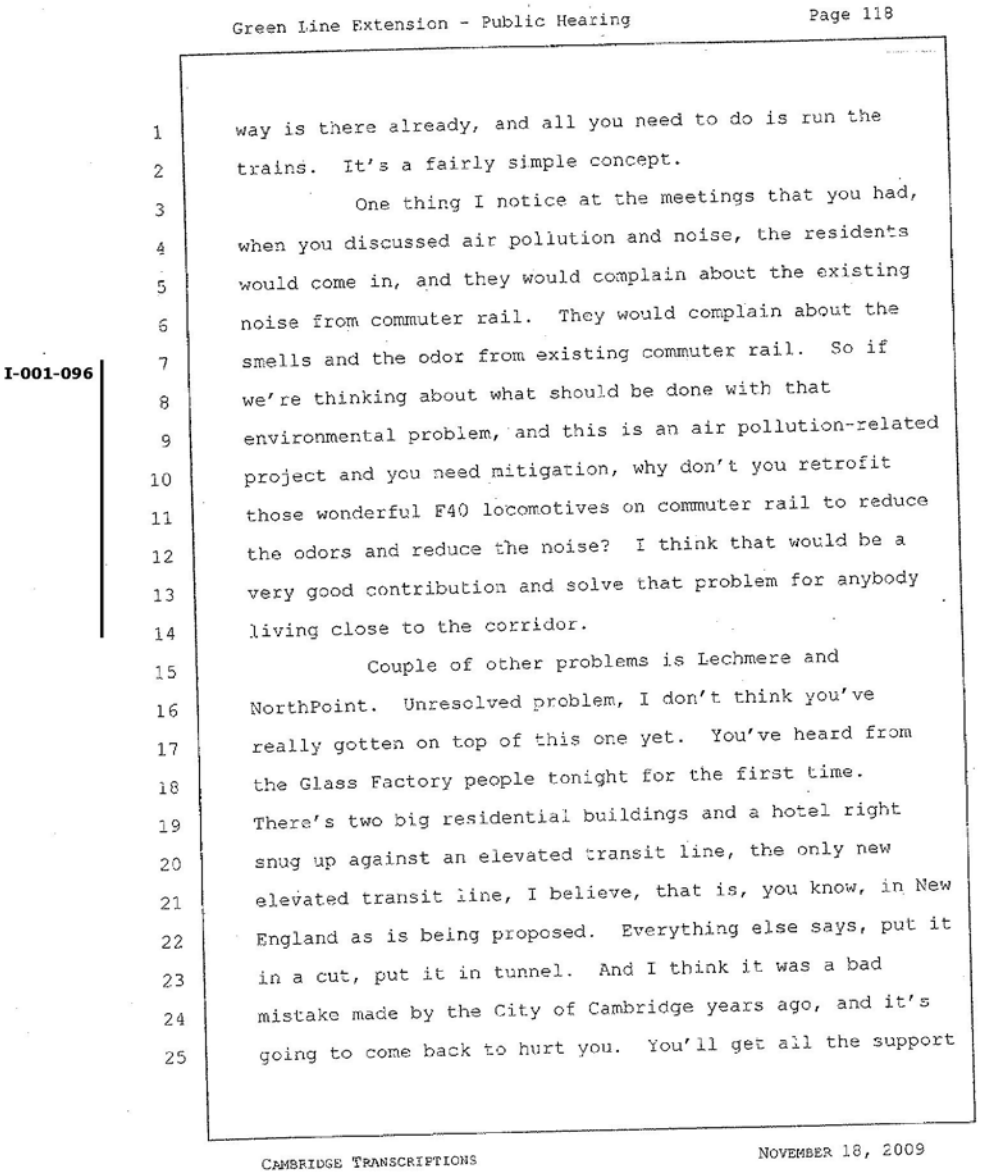
MS. NANCY FARRELL: You're out of time.

MR. ALDEN ZECHA: Thank you.

[Applause]

MS. NANCY FARRELL: Steve Kaiser, and the next two will be Wig Zamore and Cheryl Bakey.

MR. STEVE KAISER: My name is Steve Kaiser. I'm a resident of Cambridge, and I would like to say that, in concept, I support the Green Line Extension through Somerville. It's the only transit project I see that the state has that really makes sense. Things like the Urban Ring or the Silver Line tunnel or the Blue Line to Lynn make absolutely no sense at all. What you have in Somerville is the people are there already. The right of



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way is there already, and all you need to do is run the trains. It's a fairly simple concept.

One thing I notice at the meetings that you had, when you discussed air pollution and noise, the residents would come in, and they would complain about the existing noise from commuter rail. They would complain about the smells and the odor from existing commuter rail. So if we're thinking about what should be done with that environmental problem, and this is an air pollution-related project and you need mitigation, why don't you retrofit those wonderful F40 locomotives on commuter rail to reduce the odors and reduce the noise? I think that would be a very good contribution and solve that problem for anybody living close to the corridor.

Couple of other problems is Lechmere and NorthPoint. Unresolved problem, I don't think you've really gotten on top of this one yet. You've heard from the Glass Factory people tonight for the first time. There's two big residential buildings and a hotel right snug up against an elevated transit line, the only new elevated transit line, I believe, that is, you know, in New England as is being proposed. Everything else says, put it in a cut, put it in tunnel. And I think it was a bad mistake made by the City of Cambridge years ago, and it's going to come back to hurt you. You'll get all the support

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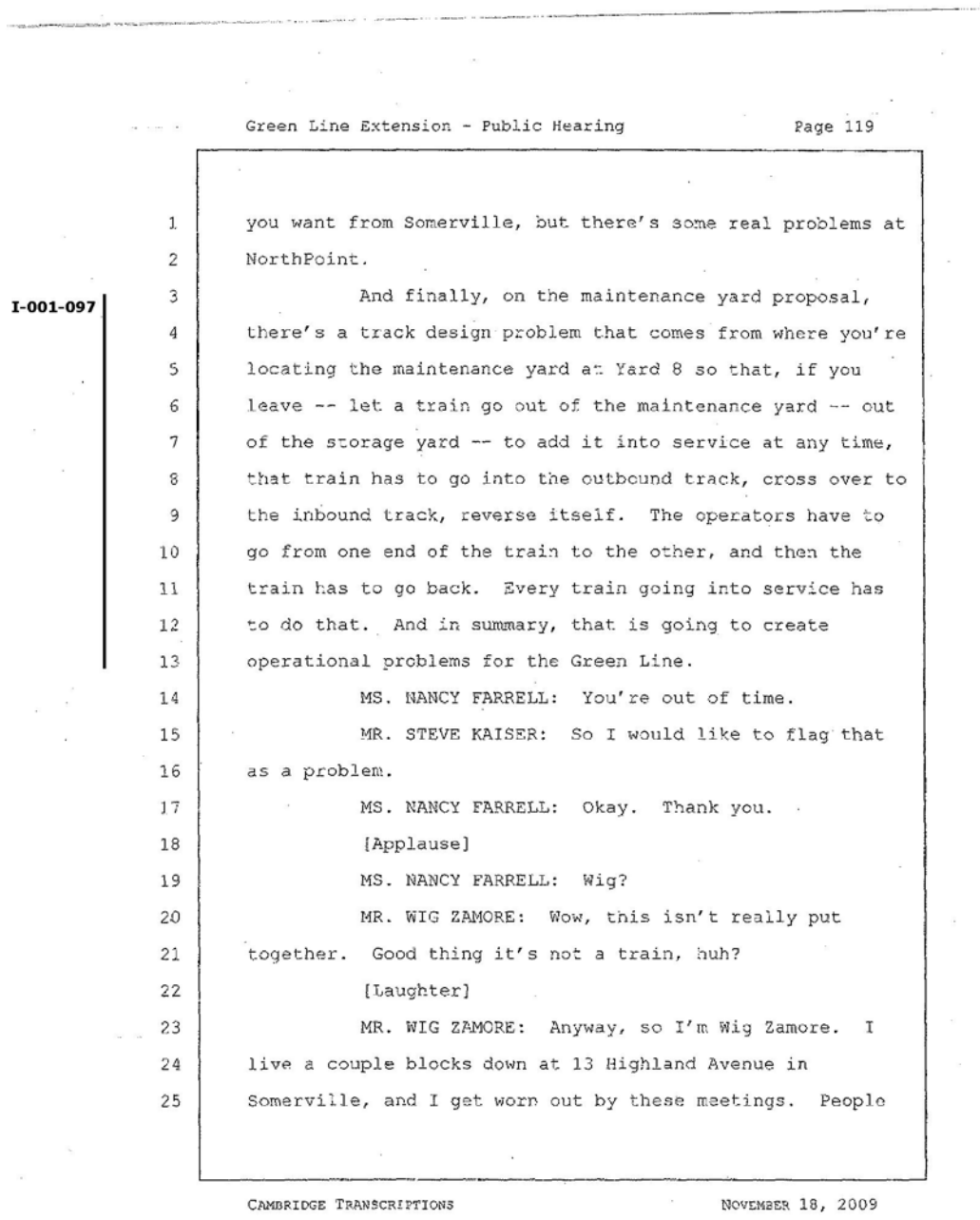
New federal ultra low sulfur diesel fuel standards will reduce the air pollution effects of diesel-powered trains, buses, and automobiles.



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you want from Somerville, but there's some real problems at NorthPoint.

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And finally, on the maintenance yard proposal, there's a track design problem that comes from where you're locating the maintenance yard at Yard 8 so that, if you leave -- let a train go out of the maintenance yard -- out of the storage yard -- to add it into service at any time, that train has to go into the outbound track, cross over to the inbound track, reverse itself. The operators have to go from one end of the train to the other, and then the train has to go back. Every train going into service has to do that. And in summary, that is going to create operational problems for the Green Line.

MS. NANCY FARRELL: You're out of time.

MR. STEVE KAISER: So I would like to flag that as a problem.

MS. NANCY FARRELL: Okay. Thank you.

[Applause]

MS. NANCY FARRELL: Wig?

MR. WIG ZAMORE: Wow, this isn't really put together. Good thing it's not a train, huh?

[Laughter]

MR. WIG ZAMORE: Anyway, so I'm Wig Zamore. I live a couple blocks down at 13 Highland Avenue in Somerville, and I get worn out by these meetings. People

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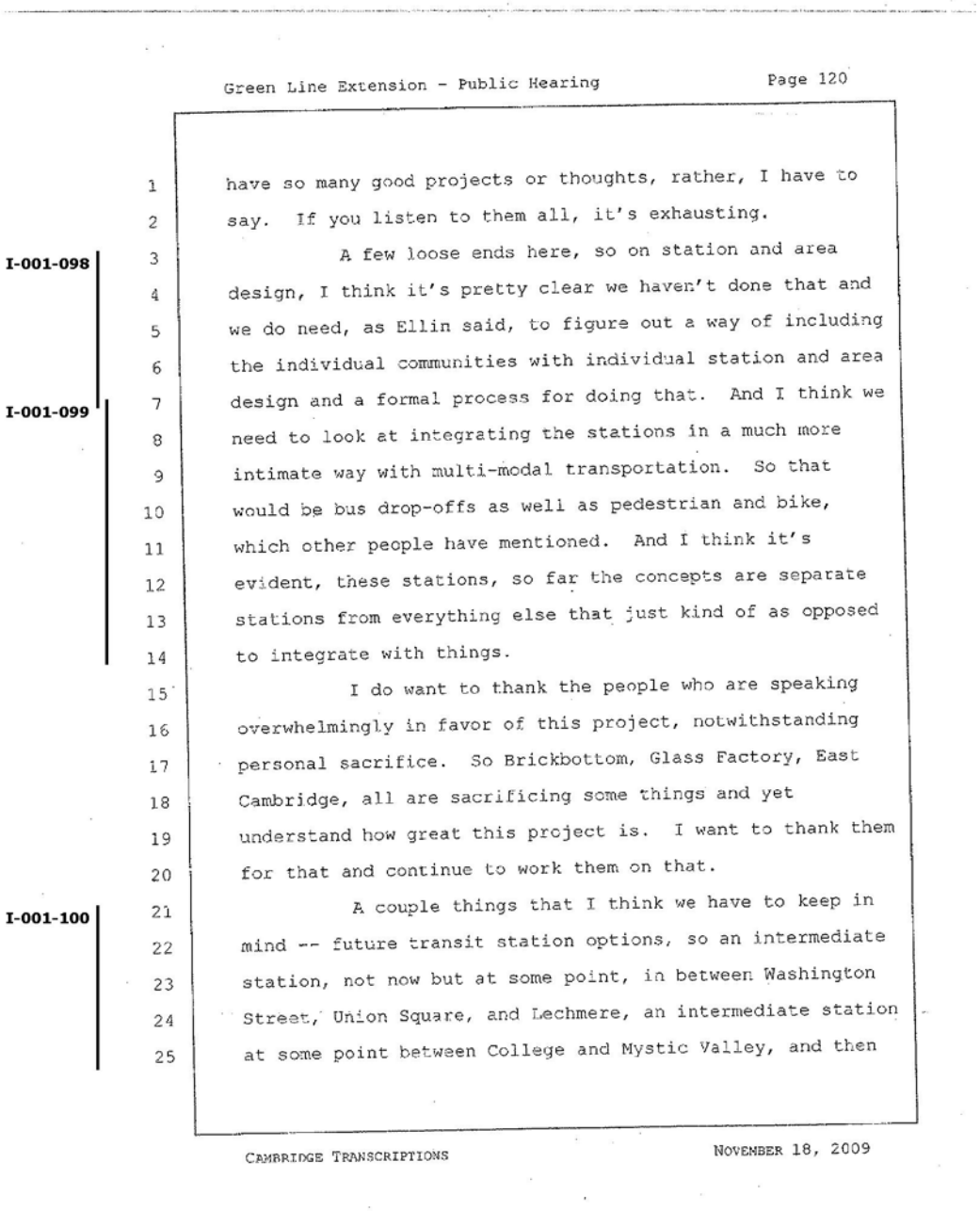

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have so many good projects or thoughts, rather, I have to say. If you listen to them all, it's exhausting.

A few loose ends here, so on station and area design, I think it's pretty clear we haven't done that and we do need, as Ellin said, to figure out a way of including the individual communities with individual station and area design and a formal process for doing that. And I think we need to look at integrating the stations in a much more intimate way with multi-modal transportation. So that would be bus drop-offs as well as pedestrian and bike, which other people have mentioned. And I think it's evident, these stations, so far the concepts are separate stations from everything else that just kind of as opposed to integrate with things.

I do want to thank the people who are speaking overwhelmingly in favor of this project, notwithstanding personal sacrifice. So Brickbottom, Glass Factory, East Cambridge, all are sacrificing some things and yet understand how great this project is. I want to thank them for that and continue to work them on that.

A couple things that I think we have to keep in mind -- future transit station options, so an intermediate station, not now but at some point, in between Washington Street, Union Square, and Lechmere, an intermediate station at some point between College and Mystic Valley, and then

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I-001-098

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-099

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

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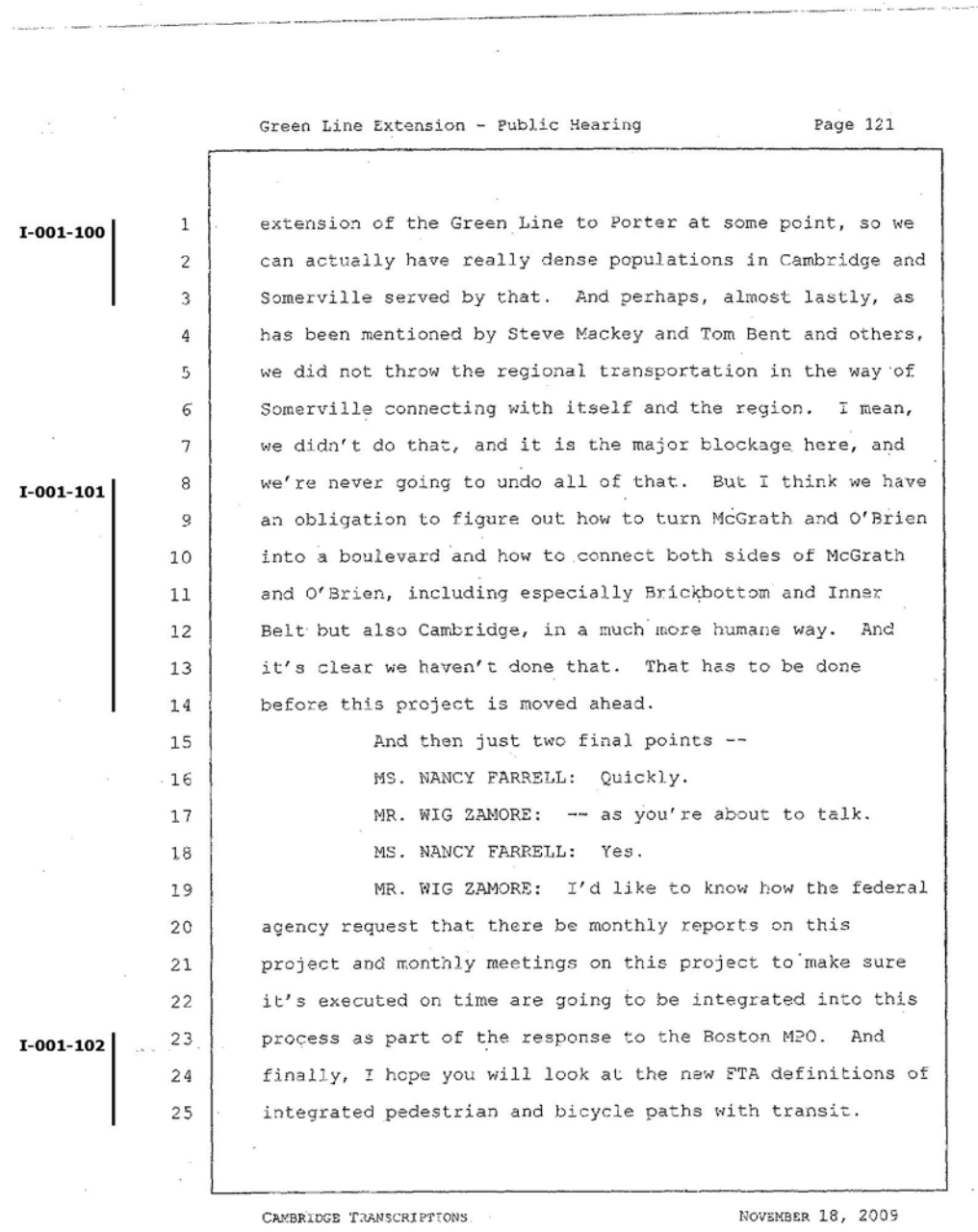
As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.



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I-001-100

extension of the Green Line to Porter at some point, so we can actually have really dense populations in Cambridge and Somerville served by that. And perhaps, almost lastly, as has been mentioned by Steve Mackey and Tom Bent and others, we did not throw the regional transportation in the way of Somerville connecting with itself and the region. I mean, we didn't do that, and it is the major blockage here, and

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we're never going to undo all of that. But I think we have an obligation to figure out how to turn McGrath and O'Brien into a boulevard and how to connect both sides of McGrath and O'Brien, including especially Brickbottom and Inner Belt but also Cambridge, in a much more humane way. And it's clear we haven't done that. That has to be done before this project is moved ahead.

And then just two final points --

MS. NANCY FARRELL: Quickly.

MR. WIG ZAMORE: -- as you're about to talk.

MS. NANCY FARRELL: Yes.

MR. WIG ZAMORE: I'd like to know how the federal agency request that there be monthly reports on this project and monthly meetings on this project to make sure it's executed on time are going to be integrated into this process as part of the response to the Boston MPO. And

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finally, I hope you will look at the new FTA definitions of integrated pedestrian and bicycle paths with transit.

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DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

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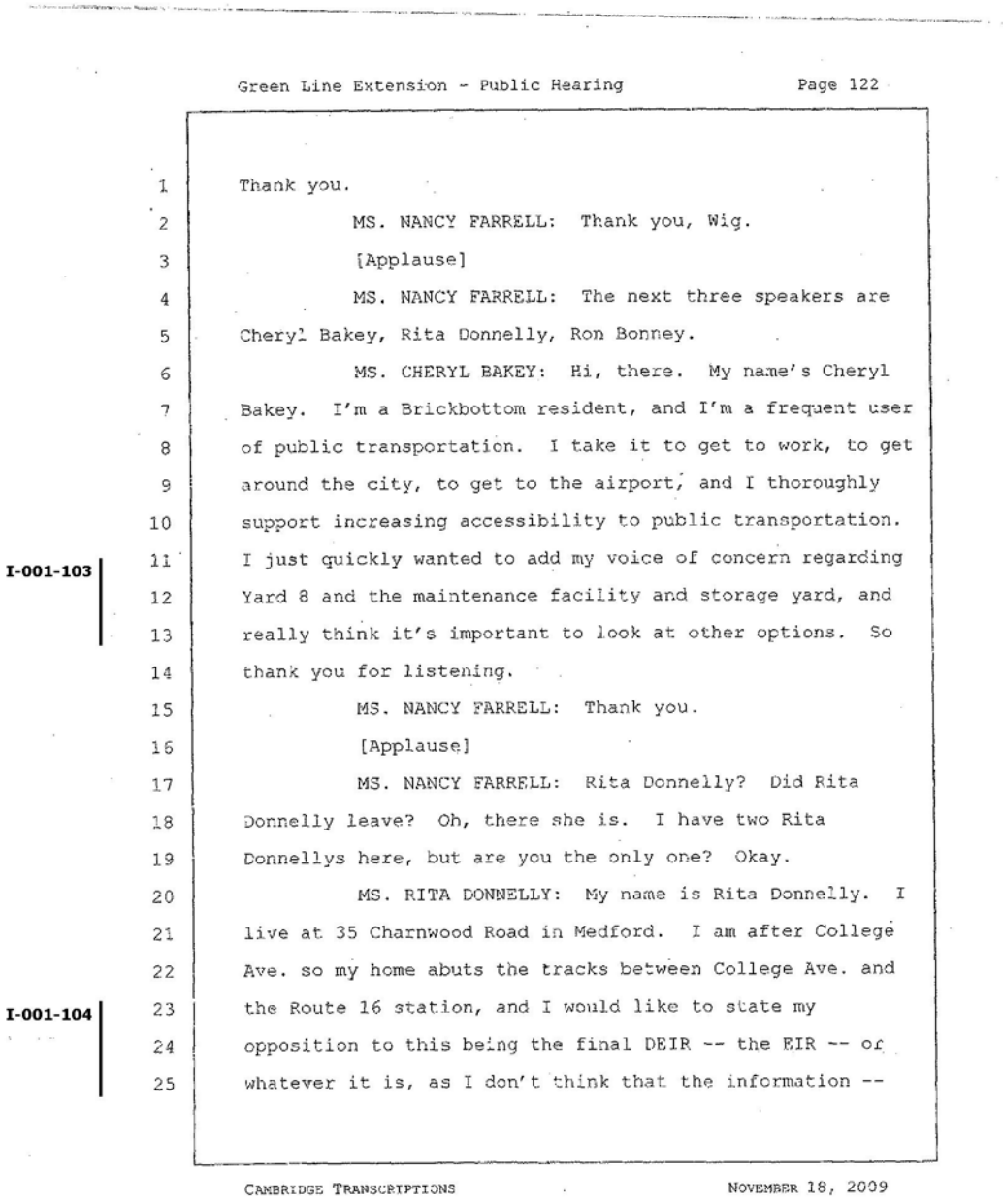
MassDOT is familiar with FTA guidence related to the funding of pedestrian and bicycle facilities. Thank you for your interest in the Green Line Extension Project.



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Thank you.

MS. NANCY FARRELL: Thank you, Wig.

[Applause]

MS. NANCY FARRELL: The next three speakers are Cheryl Bakey, Rita Donnelly, Ron Bonney.

MS. CHERYL BAKEY: Hi, there. My name's Cheryl Bakey. I'm a Brickbottom resident, and I'm a frequent user of public transportation. I take it to get to work, to get around the city, to get to the airport, and I thoroughly support increasing accessibility to public transportation. I just quickly wanted to add my voice of concern regarding Yard 8 and the maintenance facility and storage yard, and really think it's important to look at other options. So thank you for listening.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Rita Donnelly? Did Rita Donnelly leave? Oh, there she is. I have two Rita Donnellys here, but are you the only one? Okay.

MS. RITA DONNELLY: My name is Rita Donnelly. I live at 35 Charnwood Road in Medford. I am after College Ave. so my home abuts the tracks between College Ave. and the Route 16 station, and I would like to state my opposition to this being the final DEIR -- the EIR -- or whatever it is, as I don't think that the information --

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I-001-103

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

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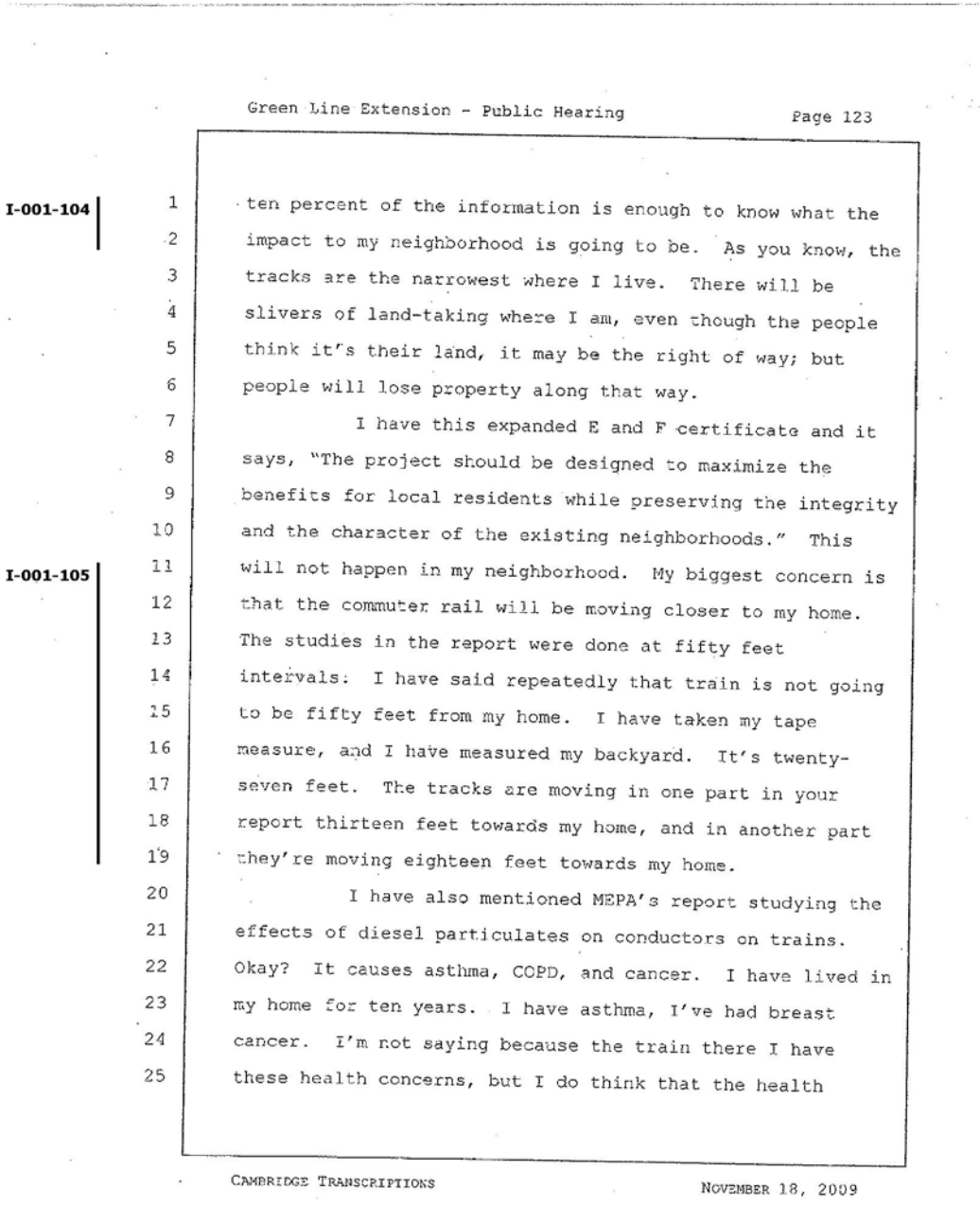
In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.



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ten percent of the information is enough to know what the impact to my neighborhood is going to be. As you know, the tracks are the narrowest where I live. There will be slivers of land-taking where I am, even though the people think it's their land, it may be the right of way; but people will lose property along that way.

I have this expanded E and F certificate and it says, "The project should be designed to maximize the benefits for local residents while preserving the integrity and the character of the existing neighborhoods." This

I-001-105

will not happen in my neighborhood. My biggest concern is that the commuter rail will be moving closer to my home. The studies in the report were done at fifty feet intervals. I have said repeatedly that train is not going to be fifty feet from my home. I have taken my tape measure, and I have measured my backyard. It's twenty-seven feet. The tracks are moving in one part in your report thirteen feet towards my home, and in another part they're moving eighteen feet towards my home.

I have also mentioned MEPA's report studying the effects of diesel particulates on conductors on trains. Okay? It causes asthma, COPD, and cancer. I have lived in my home for ten years. I have asthma, I've had breast cancer. I'm not saying because the train there I have these health concerns, but I do think that the health

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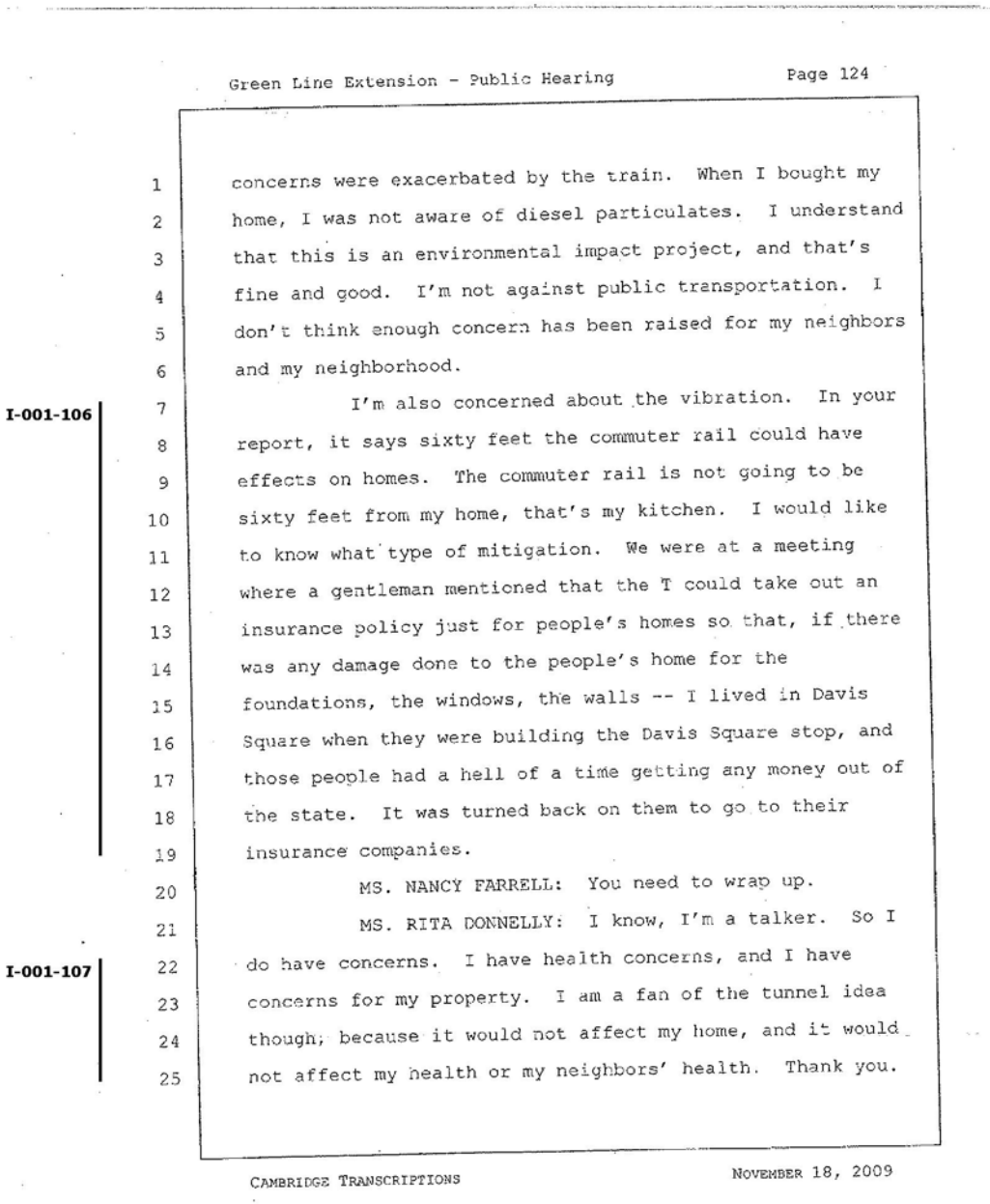
MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.



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concerns were exacerbated by the train. When I bought my home, I was not aware of diesel particulates. I understand that this is an environmental impact project, and that's fine and good. I'm not against public transportation. I don't think enough concern has been raised for my neighbors and my neighborhood.

I'm also concerned about the vibration. In your report, it says sixty feet the commuter rail could have effects on homes. The commuter rail is not going to be sixty feet from my home, that's my kitchen. I would like to know what type of mitigation. We were at a meeting where a gentleman mentioned that the T could take out an insurance policy just for people's homes so that, if there was any damage done to the people's home for the foundations, the windows, the walls -- I lived in Davis Square when they were building the Davis Square stop, and those people had a hell of a time getting any money out of the state. It was turned back on them to go to their insurance companies.

MS. NANCY FARRELL: You need to wrap up.

MS. RITA DONNELLY: I know, I'm a talker. So I do have concerns. I have health concerns, and I have concerns for my property. I am a fan of the tunnel idea though; because it would not affect my home, and it would not affect my health or my neighbors' health. Thank you.

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I-001-106

I-001-107

I-001-106

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-001-107

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Ron Bonney, then Alan Moore and Rachel Stark.

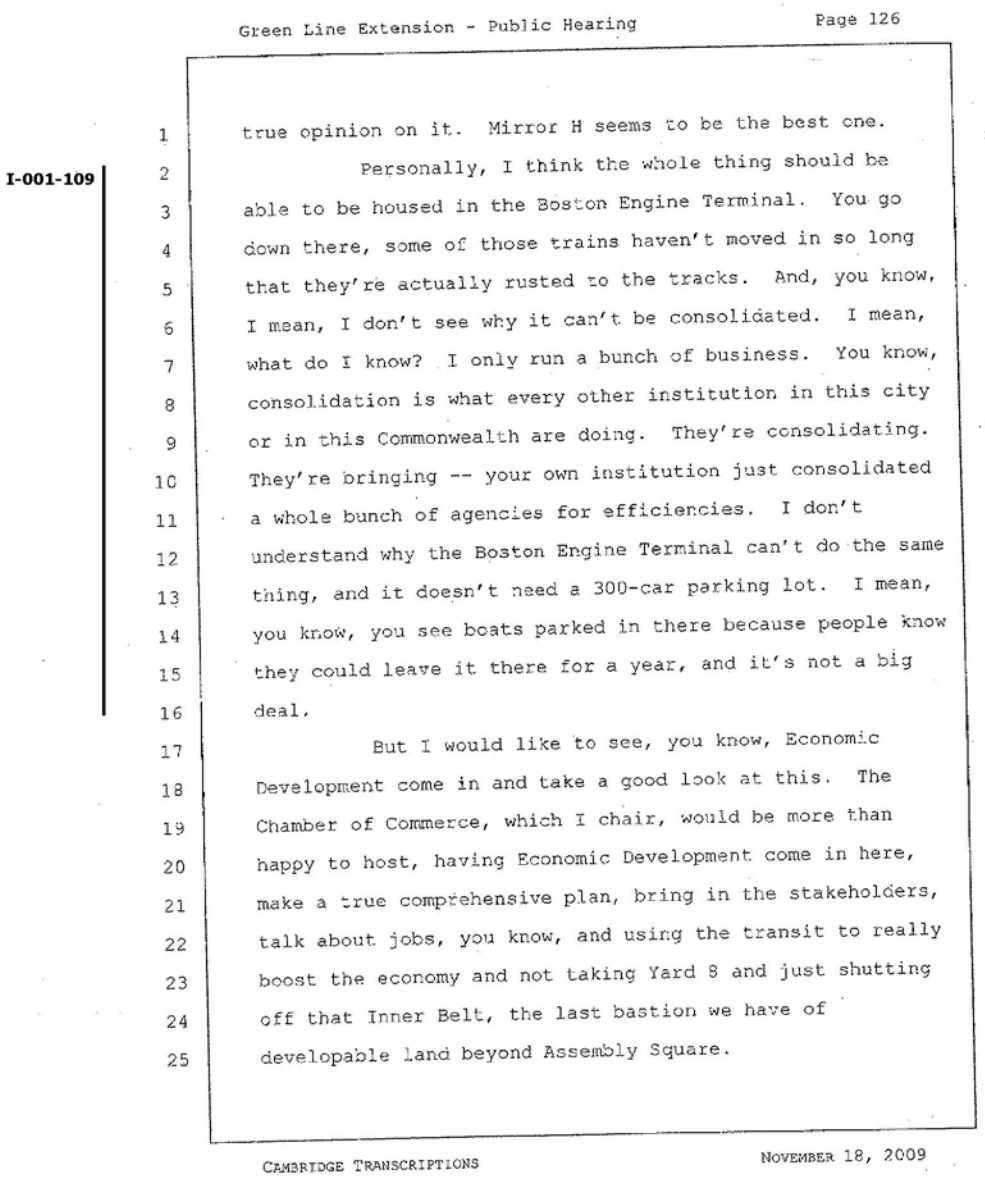
MR. RON BONNEY: Good evening, ma'am. Thank you very much for coming here. I understand it's quite a process to sit there and listen to so many different opinions. I don't think you'll find a community that is more supportive of the Green Line and the process of bringing -- or I should say returning public transportation to Somerville. You know, I mean, Somerville gave up all those homes when 93 came in. We gave up all the rapid transit stops when they were removed from Somerville. So this isn't a process of Somerville receiving some grand gift. It's simply making right something was taken away.

I-001-108

And then along comes the maintenance facility. Yard 8 would be horrific. It's one of the last bastions that Somerville has left to create, you know, future economic activity that will allow us to build up our tax base to be able to pay for our own schools without depending on state aid, which we've recently seen with the 9C cuts to our schools, teachers, fire. The only opportunity we have to come off that reliance is to build our economic base and, when you look at this new L Option, we don't have enough details to be able to actually offer a

I-001-108

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



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true opinion on it. Mirror H seems to be the best one.

Personally, I think the whole thing should be able to be housed in the Boston Engine Terminal. You go down there, some of those trains haven't moved in so long that they're actually rusted to the tracks. And, you know, I mean, I don't see why it can't be consolidated. I mean, what do I know? I only run a bunch of business. You know, consolidation is what every other institution in this city or in this Commonwealth are doing. They're consolidating. They're bringing -- your own institution just consolidated a whole bunch of agencies for efficiencies. I don't understand why the Boston Engine Terminal can't do the same thing, and it doesn't need a 300-car parking lot. I mean, you know, you see boats parked in there because people know they could leave it there for a year, and it's not a big deal.

But I would like to see, you know, Economic Development come in and take a good look at this. The Chamber of Commerce, which I chair, would be more than happy to host, having Economic Development come in here, make a true comprehensive plan, bring in the stakeholders, talk about jobs, you know, and using the transit to really boost the economy and not taking Yard 8 and just shutting off that Inner Belt, the last bastion we have of developable land beyond Assembly Square.

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As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

MS. NANCY FARRELL: Thank you. You're out of time.

MR. RON BONNEY: Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Alan Moore?

MR. ALAN MOORE: Thank you. Alan Moore, I'm a member of the Somerville Bicycle Committee and Friends of the Community Path, but I'm just speaking for myself tonight. I want to say I totally support the extension of the Green Line, and I wish to thank the DOT and everyone for all the work they've been doing. I think the draft EIR is quite a good document as a draft. Unfortunately, I know the wish was that it could be also the final EIR, and I guess I just don't see how it can be. There just seems to be a lot of shortcomings, and I'd like to mention a few of those now and then again in writing.

One of them is not going to Route 16 at this point, just in brief, just doesn't make sense to me why it wouldn't be designed and constructed all as one project. The other, the location of the maintenance facility, which there's been a lot of discussion, you know, I can understand why operationally that Yard 8 makes sense. I don't think, you know, there's arguments against that it makes sense in that sense, but it just has so many

I-001-110

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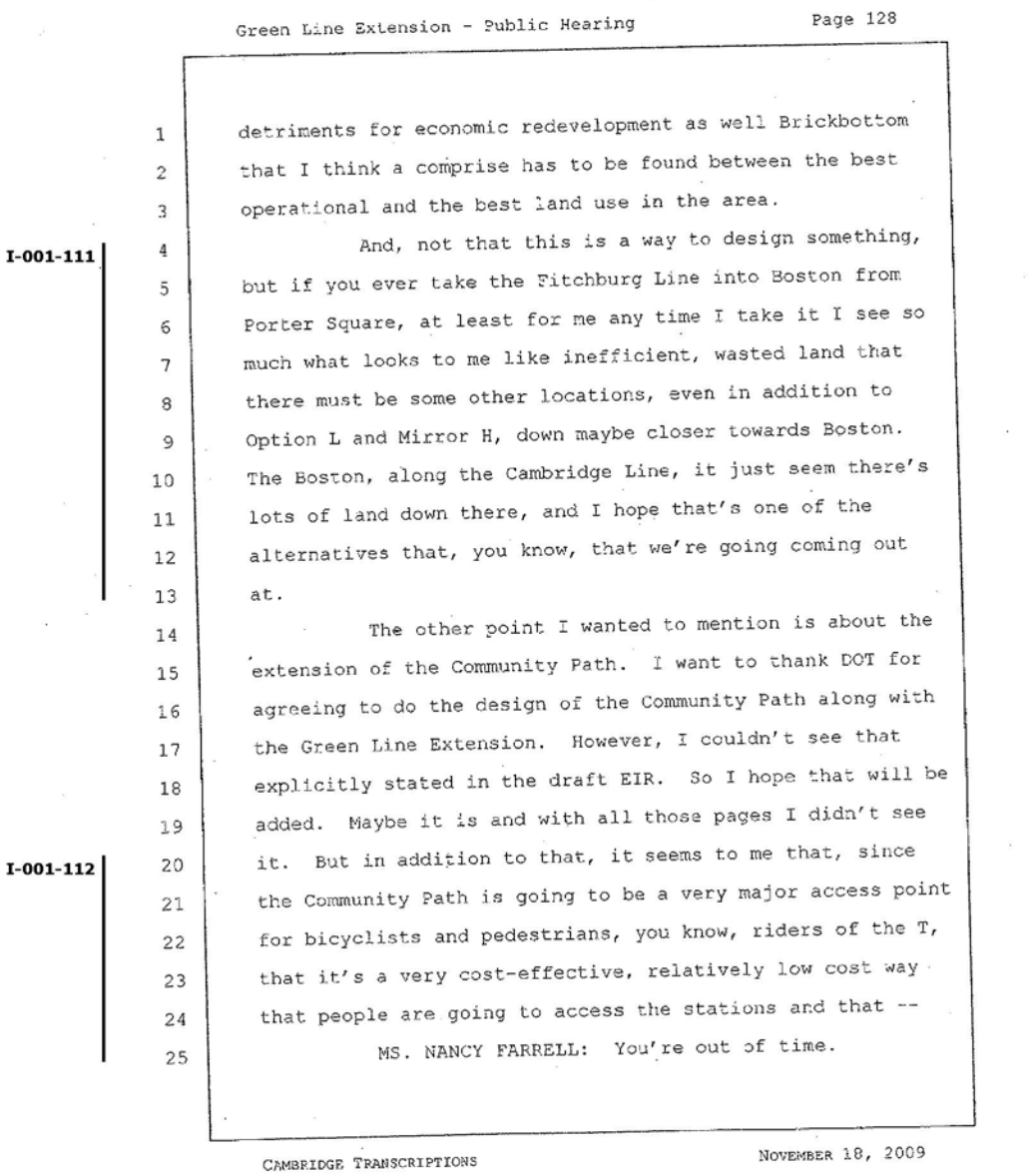

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detriments for economic redevelopment as well Brickbottom that I think a comprise has to be found between the best operational and the best land use in the area.

I-001-111

And, not that this is a way to design something, but if you ever take the Fitchburg Line into Boston from Porter Square, at least for me any time I take it I see so much what looks to me like inefficient, wasted land that there must be some other locations, even in addition to Option L and Mirror H, down maybe closer towards Boston. The Boston, along the Cambridge Line, it just seem there's lots of land down there, and I hope that's one of the alternatives that, you know, that we're going coming out at.

The other point I wanted to mention is about the extension of the Community Path. I want to thank DOT for agreeing to do the design of the Community Path along with the Green Line Extension. However, I couldn't see that explicitly stated in the draft EIR. So I hope that will be added. Maybe it is and with all those pages I didn't see it.

I-001-112

But in addition to that, it seems to me that, since the Community Path is going to be a very major access point for bicyclists and pedestrians, you know, riders of the T, that it's a very cost-effective, relatively low cost way that people are going to access the stations and that --

MS. NANCY FARRELL: You're out of time.

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I-001-111

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-001-112

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-001-112

MR. ALAN MOORE: -- okay -- and that really most of the cost of the construction of it really should be made part of the project like it was on the Linear Path of the Red Line and the southwest corridor on the Orange Line, and that it should be put in -- the cost should be put into the funding request to New Starts. Thank you.

MS. NANCY FARRELL: Okay. Thank you.

[Applause]

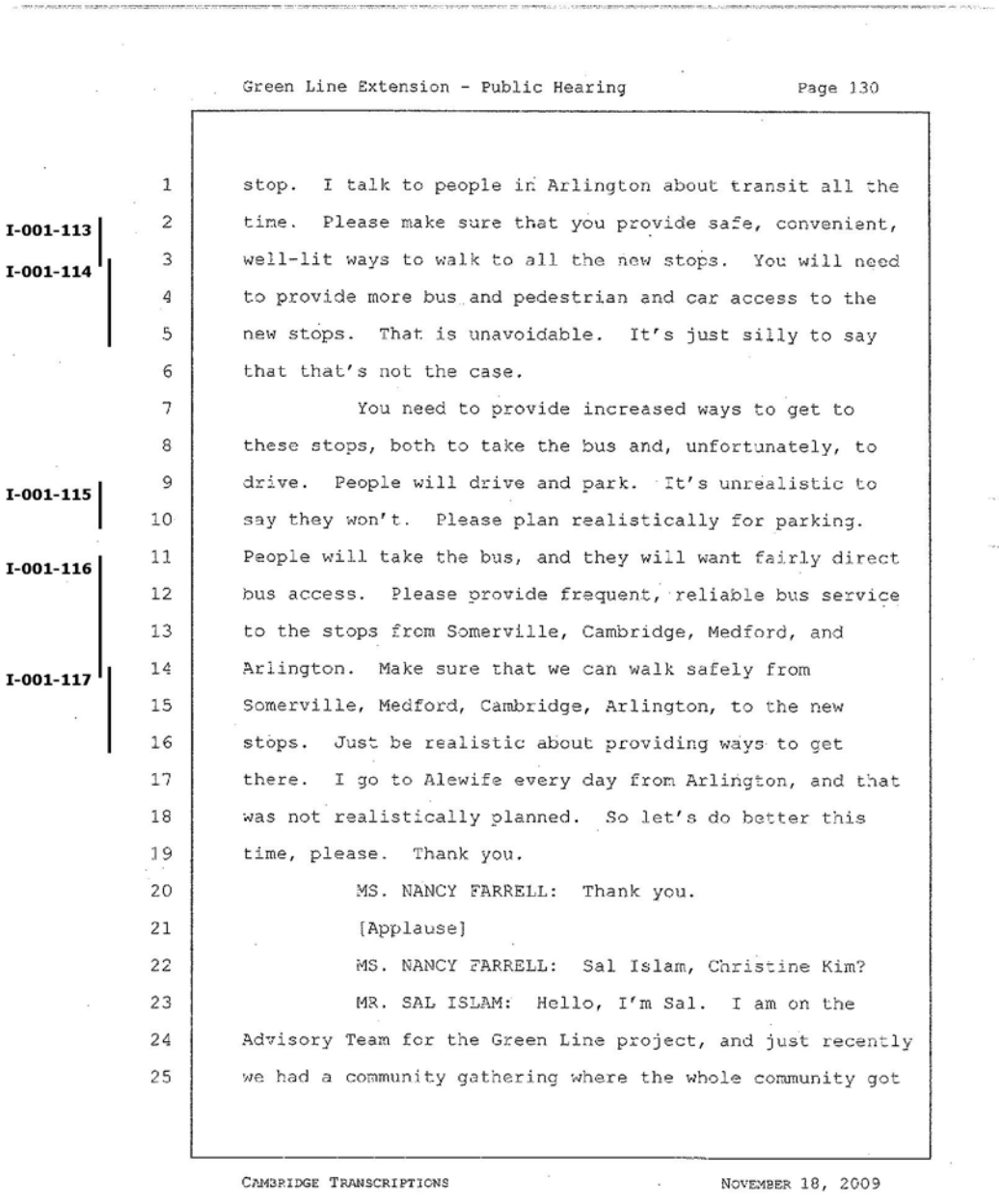
MS. NANCY FARRELL: Rachel Stark? I'm sorry, after Rachel, we'll have Sal Islam, Christine Kim, and Alex Epstein. Hello.

MS. RACHEL STARK: Hi. I'm trying not to break Somerville here.

MS. NANCY FARRELL: It's pretty powerful there, huh?

MS. RACHEL STARK: There you have it. Hi, my name is Rachel Stark, and I'm the Founder and Chair of Walking in Arlington -- which is so far the first Arlingtonian to speak that I know of -- which is a pedestrian advocacy and walking safety group. I am delighted that you are talking about extending the Green Line. Thank you so much, and thank you for these public meetings, many of which I've been to.

Lots of people from Arlington would love to be able to walk and cycle and take the bus to a Green Line



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I-001-113
I-001-114
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stop. I talk to people in Arlington about transit all the time. Please make sure that you provide safe, convenient, well-lit ways to walk to all the new stops. You will need to provide more bus and pedestrian and car access to the new stops. That is unavoidable. It's just silly to say that that's not the case.

You need to provide increased ways to get to these stops, both to take the bus and, unfortunately, to drive. People will drive and park. It's unrealistic to say they won't. Please plan realistically for parking. People will take the bus, and they will want fairly direct bus access. Please provide frequent, reliable bus service to the stops from Somerville, Cambridge, Medford, and Arlington. Make sure that we can walk safely from Somerville, Medford, Cambridge, Arlington, to the new stops. Just be realistic about providing ways to get there. I go to Alewife every day from Arlington, and that was not realistically planned. So let's do better this time, please. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Sal Islam, Christine Kim?

MR. SAL ISLAM: Hello, I'm Sal. I am on the Advisory Team for the Green Line project, and just recently we had a community gathering where the whole community got

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I-001-113

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-114

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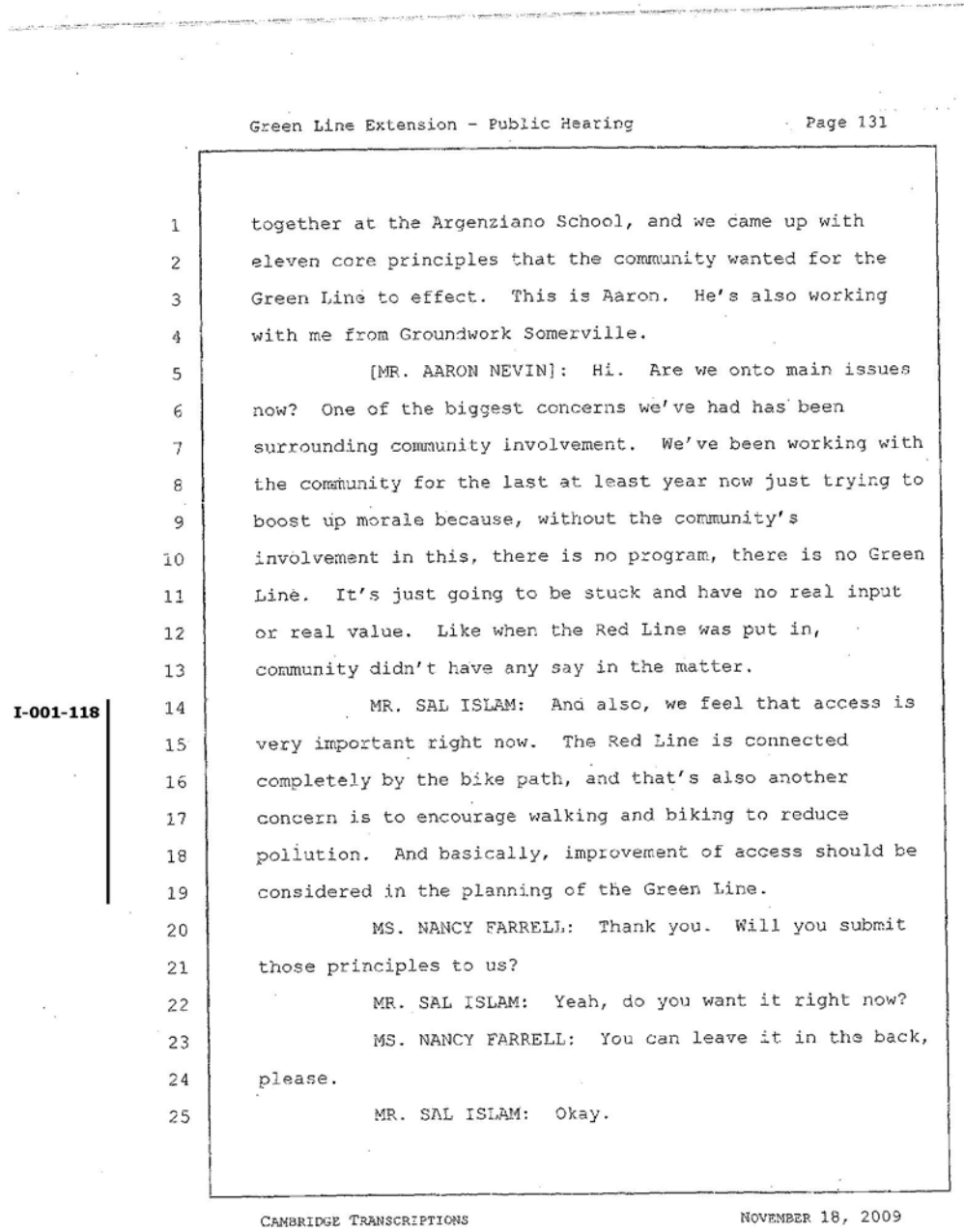

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together at the Argenziano School, and we came up with eleven core principles that the community wanted for the Green Line to effect. This is Aaron. He's also working with me from Groundwork Somerville.

[MR. AARON NEVIN]: Hi. Are we onto main issues now? One of the biggest concerns we've had has been surrounding community involvement. We've been working with the community for the last at least year now just trying to boost up morale because, without the community's involvement in this, there is no program, there is no Green Line. It's just going to be stuck and have no real input or real value. Like when the Red Line was put in, community didn't have any say in the matter.

I-001-118

MR. SAL ISLAM: And also, we feel that access is very important right now. The Red Line is connected completely by the bike path, and that's also another concern is to encourage walking and biking to reduce pollution. And basically, improvement of access should be considered in the planning of the Green Line.

MS. NANCY FARRELL: Thank you. Will you submit those principles to us?

MR. SAL ISLAM: Yeah, do you want it right now?

MS. NANCY FARRELL: You can leave it in the back, please.

MR. SAL ISLAM: Okay.

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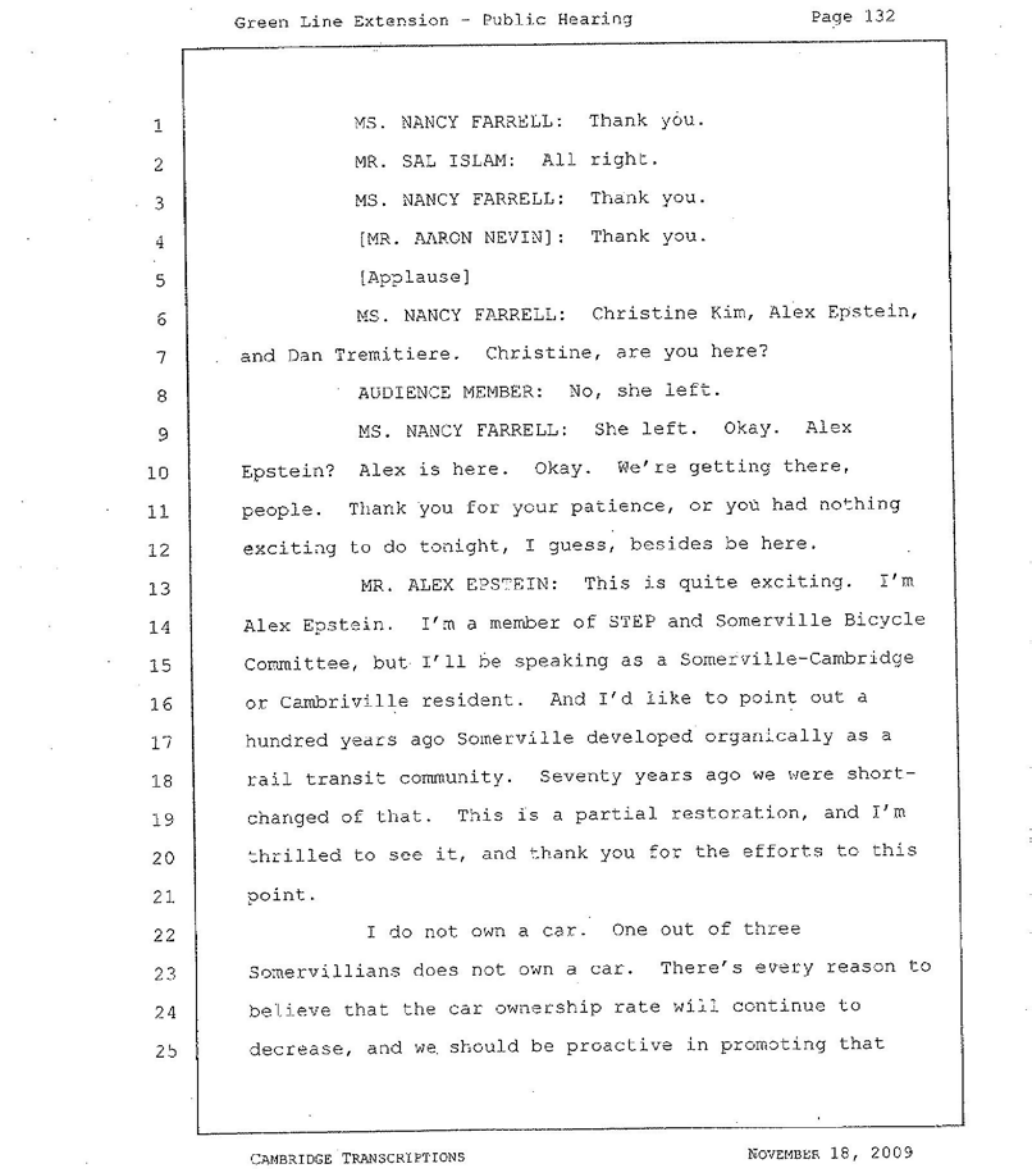
In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-115

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-001-116

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.



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MS. NANCY FARRELL: Thank you.
MR. SAL ISLAM: All right.
MS. NANCY FARRELL: Thank you.
[MR. AARON NEVIN]: Thank you.
[Applause]
MS. NANCY FARRELL: Christine Kim, Alex Epstein, and Dan Tremitiere. Christine, are you here?
AUDIENCE MEMBER: No, she left.
MS. NANCY FARRELL: She left. Okay. Alex Epstein? Alex is here. Okay. We're getting there, people. Thank you for your patience, or you had nothing exciting to do tonight, I guess, besides be here.
MR. ALEX EPSTEIN: This is quite exciting. I'm Alex Epstein. I'm a member of STEP and Somerville Bicycle Committee, but I'll be speaking as a Somerville-Cambridge or Cambriville resident. And I'd like to point out a hundred years ago Somerville developed organically as a rail transit community. Seventy years ago we were short-changed of that. This is a partial restoration, and I'm thrilled to see it, and thank you for the efforts to this point.
I do not own a car. One out of three Somervillians does not own a car. There's every reason to believe that the car ownership rate will continue to decrease, and we should be proactive in promoting that

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I-001-117

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I-001-118

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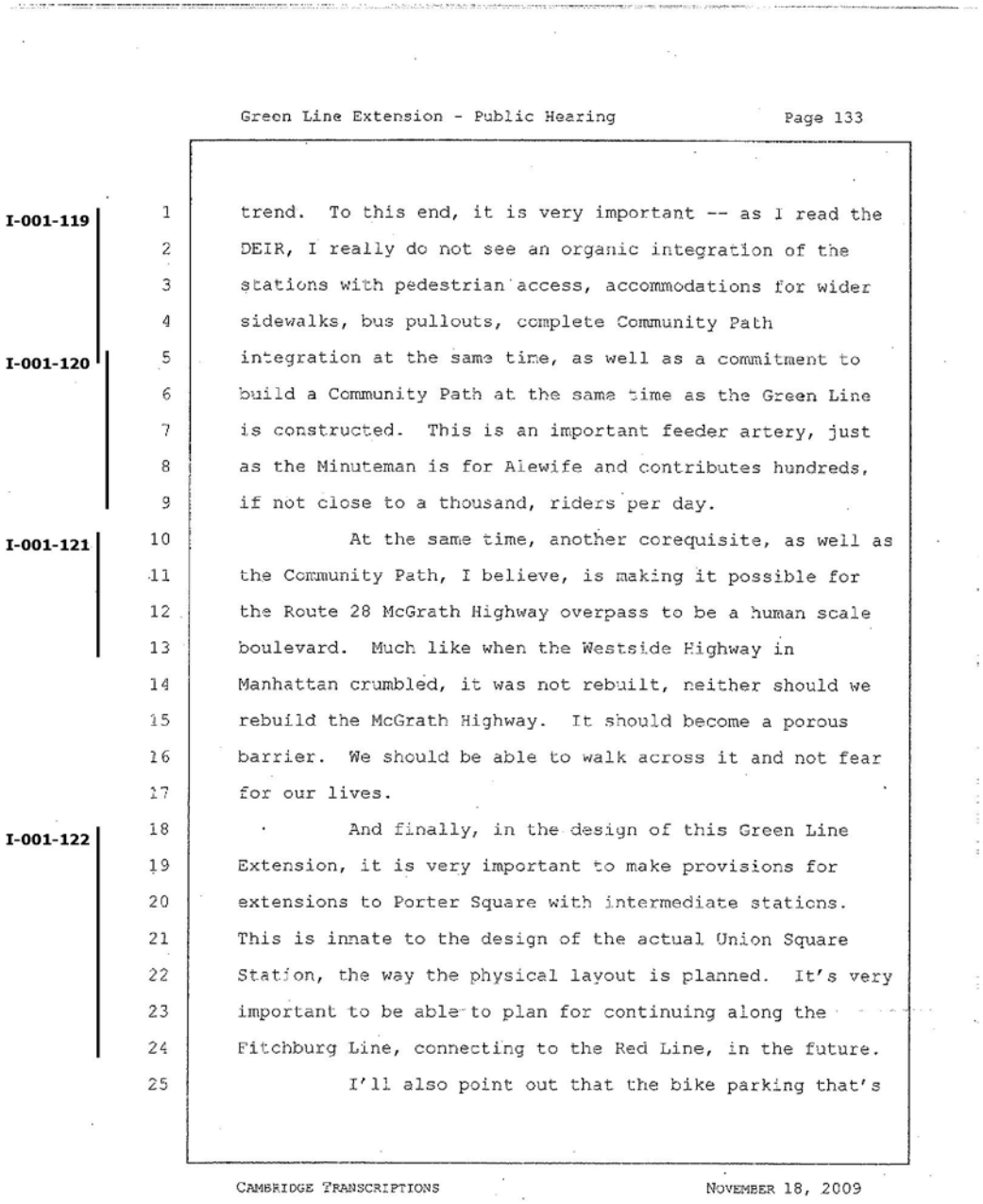

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I-001-119

trend. To this end, it is very important -- as I read the DEIR, I really do not see an organic integration of the stations with pedestrian access, accommodations for wider sidewalks, bus pullouts, complete Community Path

I-001-120

integration at the same time, as well as a commitment to build a Community Path at the same time as the Green Line is constructed. This is an important feeder artery, just as the Minuteman is for Alewife and contributes hundreds, if not close to a thousand, riders per day.

I-001-121

At the same time, another corequisite, as well as the Community Path, I believe, is making it possible for the Route 28 McGrath Highway overpass to be a human scale boulevard. Much like when the Westside Highway in Manhattan crumbled, it was not rebuilt, neither should we rebuild the McGrath Highway. It should become a porous barrier. We should be able to walk across it and not fear for our lives.

I-001-122

And finally, in the design of this Green Line Extension, it is very important to make provisions for extensions to Porter Square with intermediate stations. This is innate to the design of the actual Union Square Station, the way the physical layout is planned. It's very important to be able to plan for continuing along the Fitchburg Line, connecting to the Red Line, in the future.

I'll also point out that the bike parking that's

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I-001-119

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-001-120

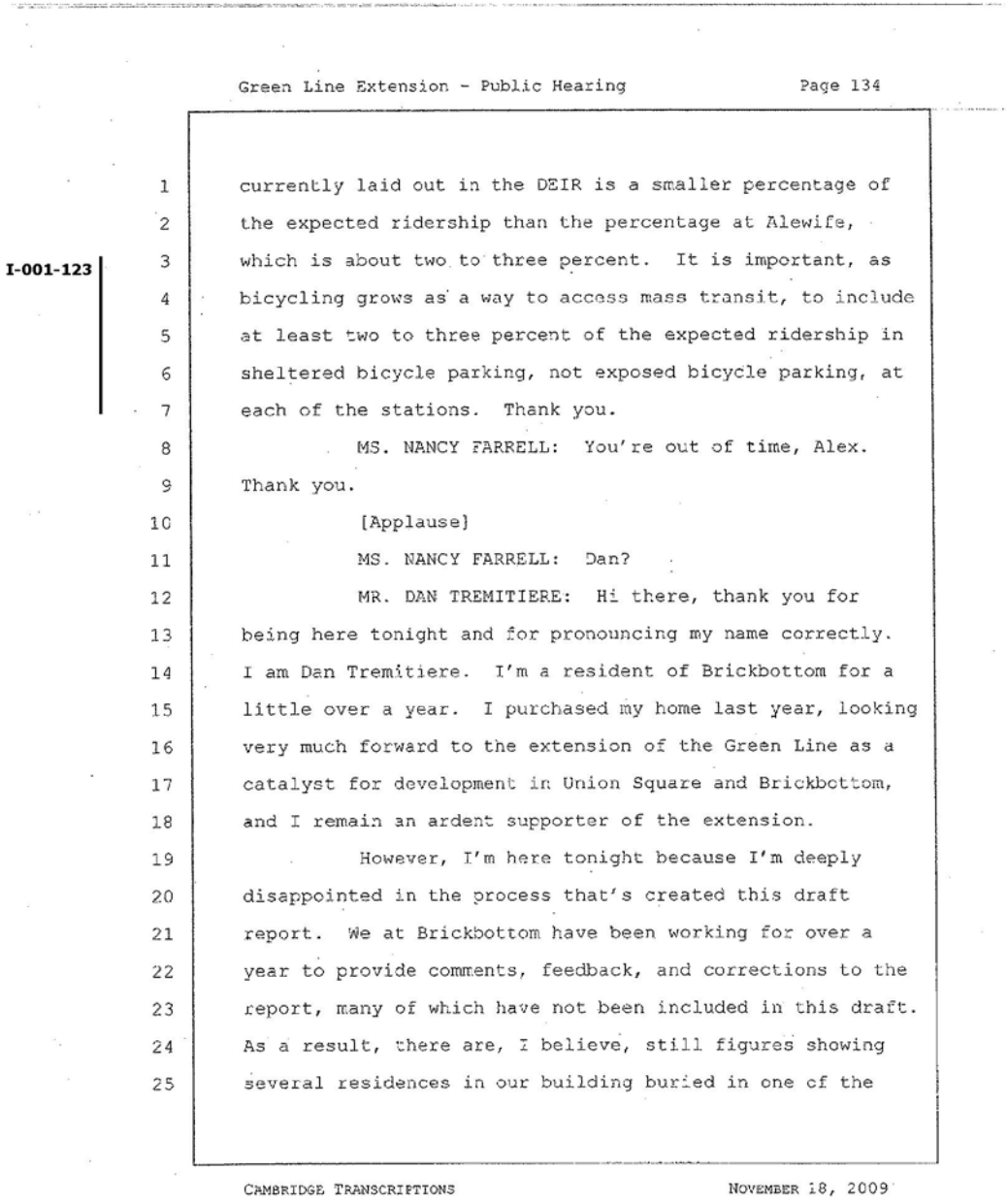
MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-001-121

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-001-122

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.



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I-001-123

currently laid out in the DEIR is a smaller percentage of the expected ridership than the percentage at Alewife, which is about two to three percent. It is important, as bicycling grows as a way to access mass transit, to include at least two to three percent of the expected ridership in sheltered bicycle parking, not exposed bicycle parking, at each of the stations. Thank you.

MS. NANCY FARRELL: You're out of time, Alex. Thank you.

[Applause]

MS. NANCY FARRELL: Dan?

MR. DAN TREMITIERE: Hi there, thank you for being here tonight and for pronouncing my name correctly. I am Dan Tremitiere. I'm a resident of Brickbottom for a little over a year. I purchased my home last year, looking very much forward to the extension of the Green Line as a catalyst for development in Union Square and Brickbottom, and I remain an ardent supporter of the extension.

However, I'm here tonight because I'm deeply disappointed in the process that's created this draft report. We at Brickbottom have been working for over a year to provide comments, feedback, and corrections to the report, many of which have not been included in this draft. As a result, there are, I believe, still figures showing several residences in our building buried in one of the

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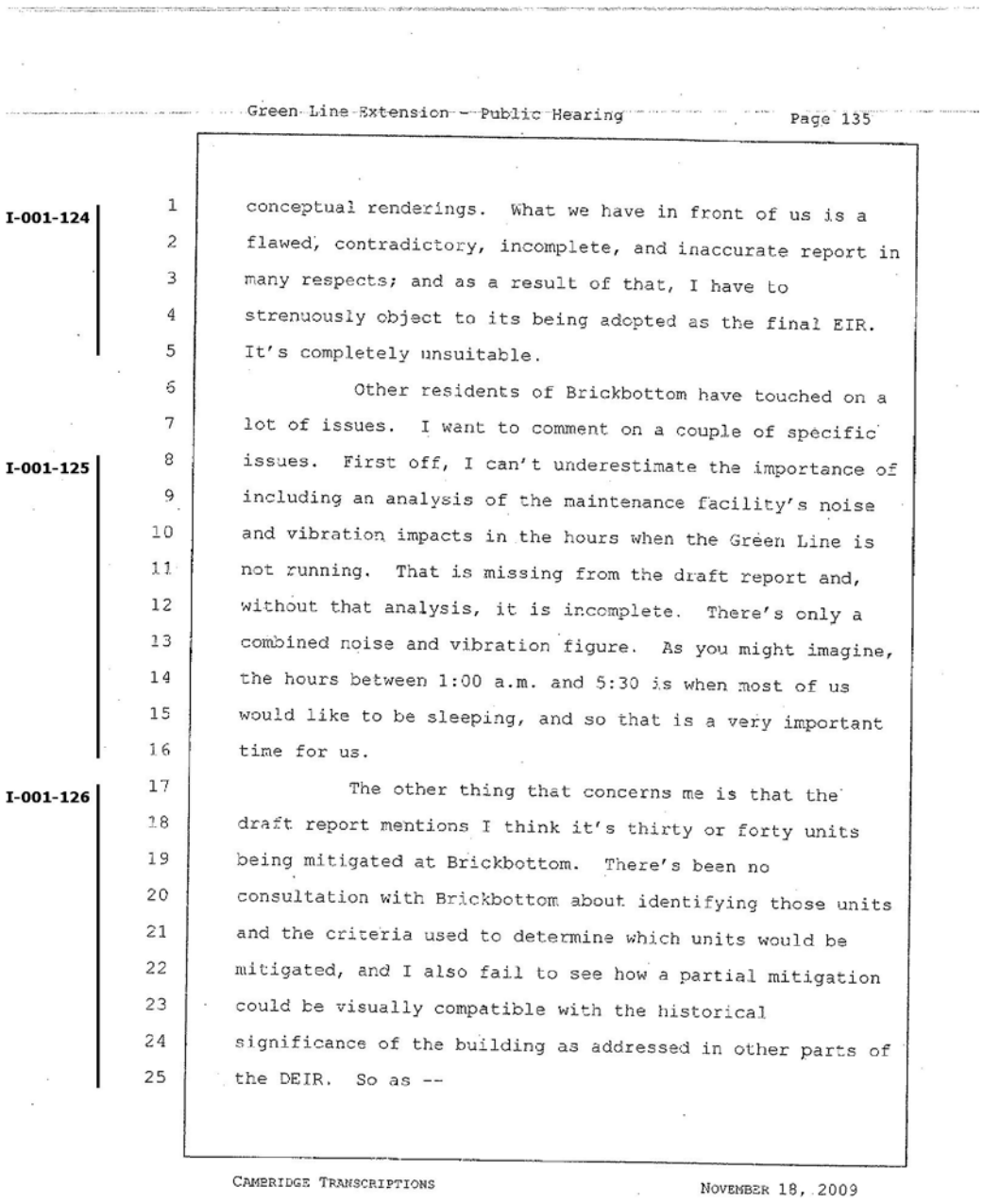
I-001-123

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.



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I-001-124

conceptual renderings. What we have in front of us is a flawed, contradictory, incomplete, and inaccurate report in many respects; and as a result of that, I have to strenuously object to its being adopted as the final EIR. It's completely unsuitable.

Other residents of Brickbottom have touched on a lot of issues. I want to comment on a couple of specific

I-001-125

issues. First off, I can't underestimate the importance of including an analysis of the maintenance facility's noise and vibration impacts in the hours when the Green Line is not running. That is missing from the draft report and, without that analysis, it is incomplete. There's only a combined noise and vibration figure. As you might imagine, the hours between 1:00 a.m. and 5:30 is when most of us would like to be sleeping, and so that is a very important time for us.

I-001-126

The other thing that concerns me is that the draft report mentions I think it's thirty or forty units being mitigated at Brickbottom. There's been no consultation with Brickbottom about identifying those units and the criteria used to determine which units would be mitigated, and I also fail to see how a partial mitigation could be visually compatible with the historical significance of the building as addressed in other parts of the DEIR. So as --

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I-001-124

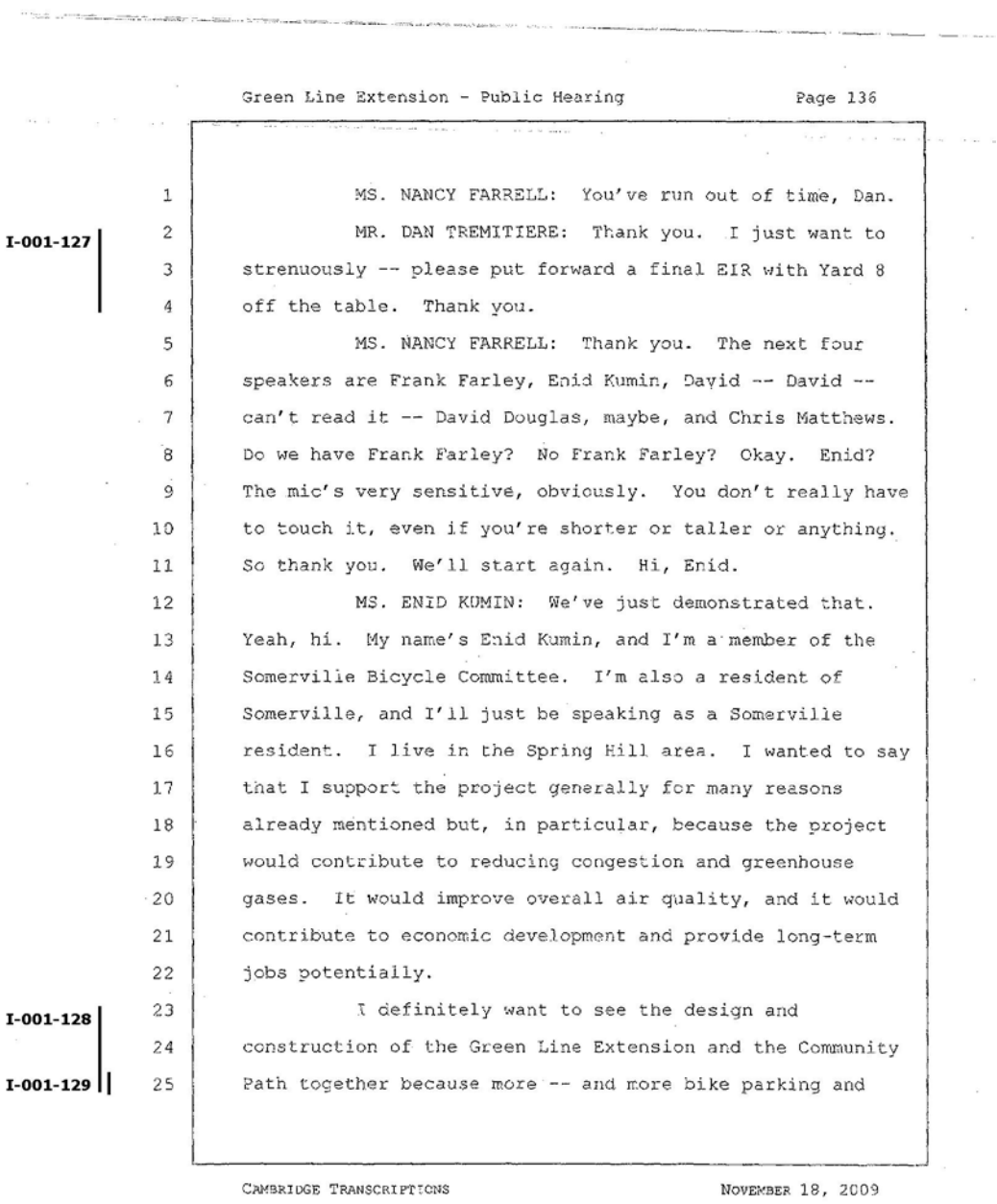
In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-001-125

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-001-126

As described in Section 6.5.4.7 of the DEIR/EA, noise mitigation measures such as new doors, windows, or other insulating treatments will be appropriate for the historic property and meet the Secretary of Interior's standards for rehabilitation.



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MS. NANCY FARRELL: You've run out of time, Dan.

I-001-127

MR. DAN TREMITIERE: Thank you. I just want to strenuously -- please put forward a final EIR with Yard 8 off the table. Thank you.

MS. NANCY FARRELL: Thank you. The next four speakers are Frank Farley, Enid Kumin, David -- David -- can't read it -- David Douglas, maybe, and Chris Matthews. Do we have Frank Farley? No Frank Farley? Okay. Enid? The mic's very sensitive, obviously. You don't really have to touch it, even if you're shorter or taller or anything. So thank you. We'll start again. Hi, Enid.

MS. ENID KUMIN: We've just demonstrated that. Yeah, hi. My name's Enid Kumin, and I'm a member of the Somerville Bicycle Committee. I'm also a resident of Somerville, and I'll just be speaking as a Somerville resident. I live in the Spring Hill area. I wanted to say that I support the project generally for many reasons already mentioned but, in particular, because the project would contribute to reducing congestion and greenhouse gases. It would improve overall air quality, and it would contribute to economic development and provide long-term jobs potentially.

I-001-128

I definitely want to see the design and construction of the Green Line Extension and the Community Path together because more -- and more bike parking and

I-001-129

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I-001-127

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-128

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-001-129

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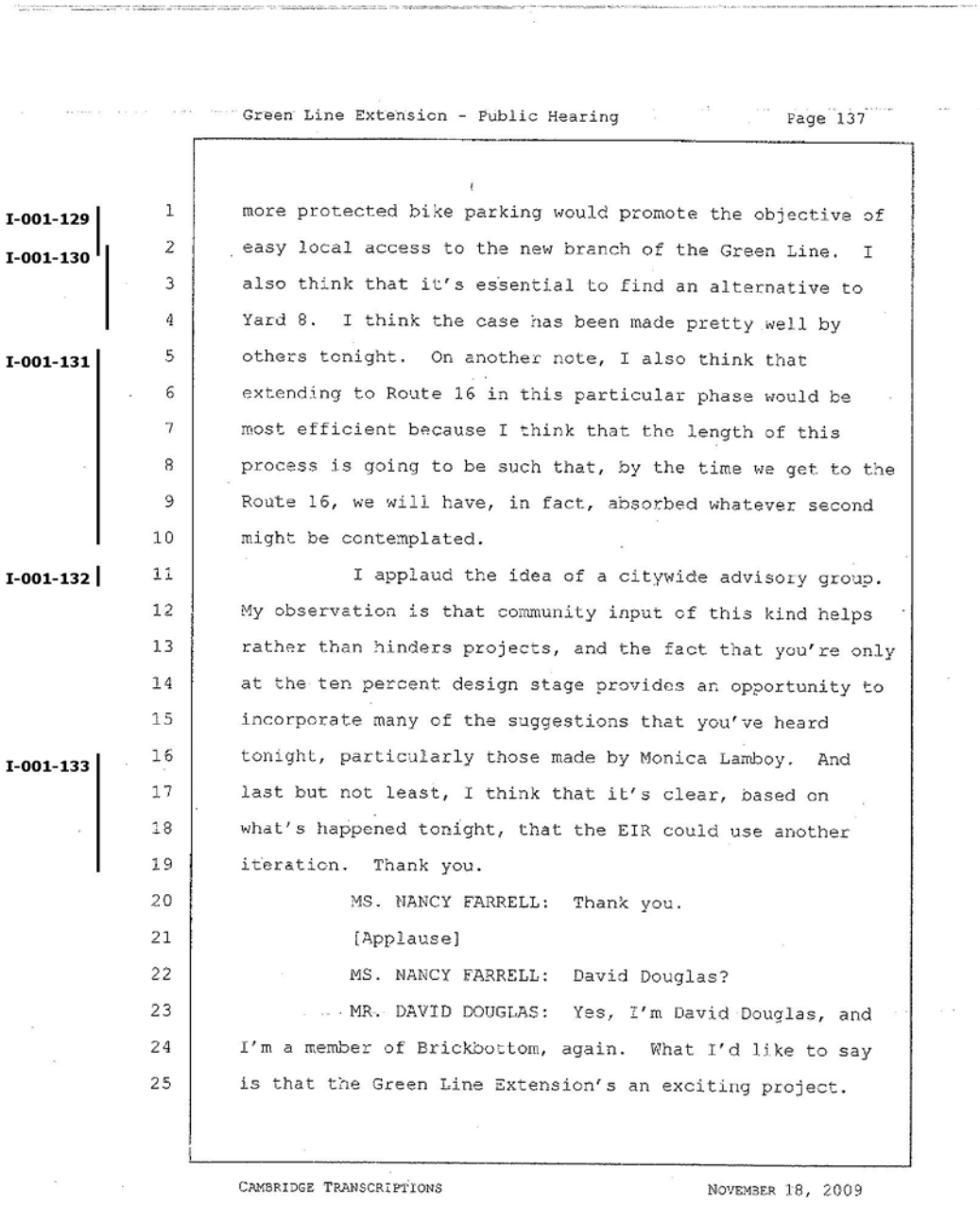

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more protected bike parking would promote the objective of easy local access to the new branch of the Green Line. I also think that it's essential to find an alternative to Yard 8. I think the case has been made pretty well by others tonight. On another note, I also think that extending to Route 16 in this particular phase would be most efficient because I think that the length of this process is going to be such that, by the time we get to the Route 16, we will have, in fact, absorbed whatever second might be contemplated.

I applaud the idea of a citywide advisory group. My observation is that community input of this kind helps rather than hinders projects, and the fact that you're only at the ten percent design stage provides an opportunity to incorporate many of the suggestions that you've heard tonight, particularly those made by Monica Lamboy. And last but not least, I think that it's clear, based on what's happened tonight, that the EIR could use another iteration. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: David Douglas?

MR. DAVID DOUGLAS: Yes, I'm David Douglas, and I'm a member of Brickbottom, again. What I'd like to say is that the Green Line Extension's an exciting project.

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I-001-130

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-131

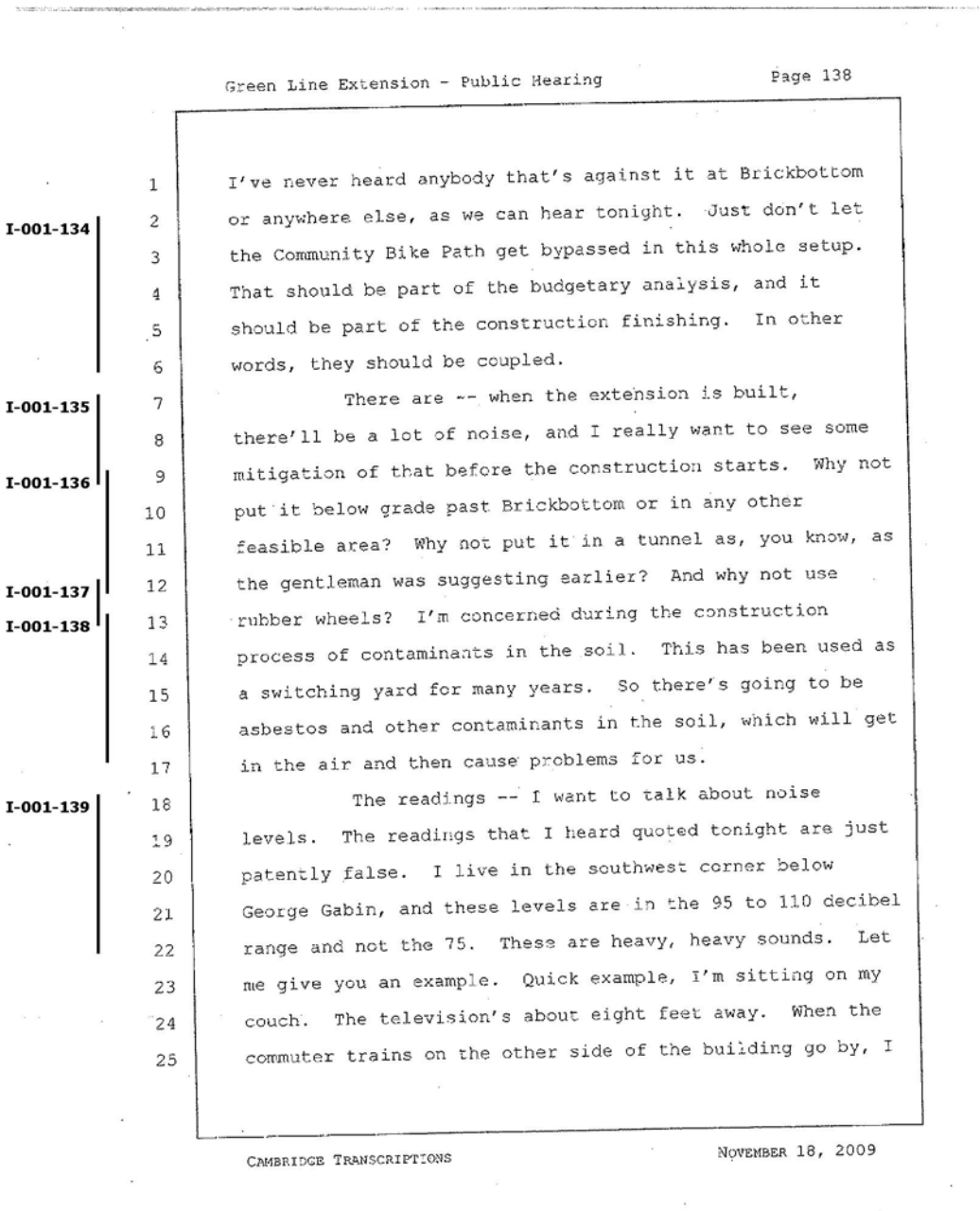
Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-001-132

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-133

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.



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I've never heard anybody that's against it at Brickbottom or anywhere else, as we can hear tonight. Just don't let the Community Bike Path get bypassed in this whole setup. That should be part of the budgetary analysis, and it should be part of the construction finishing. In other words, they should be coupled.

There are -- when the extension is built, there'll be a lot of noise, and I really want to see some mitigation of that before the construction starts. Why not put it below grade past Brickbottom or in any other feasible area? Why not put it in a tunnel as, you know, as the gentleman was suggesting earlier? And why not use rubber wheels? I'm concerned during the construction process of contaminants in the soil. This has been used as a switching yard for many years. So there's going to be asbestos and other contaminants in the soil, which will get in the air and then cause problems for us.

The readings -- I want to talk about noise levels. The readings that I heard quoted tonight are just patently false. I live in the southwest corner below George Gabin, and these levels are in the 95 to 110 decibel range and not the 75. These are heavy, heavy sounds. Let me give you an example. Quick example, I'm sitting on my couch. The television's about eight feet away. When the commuter trains on the other side of the building go by, I

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I-001-134

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I-001-135

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-001-136

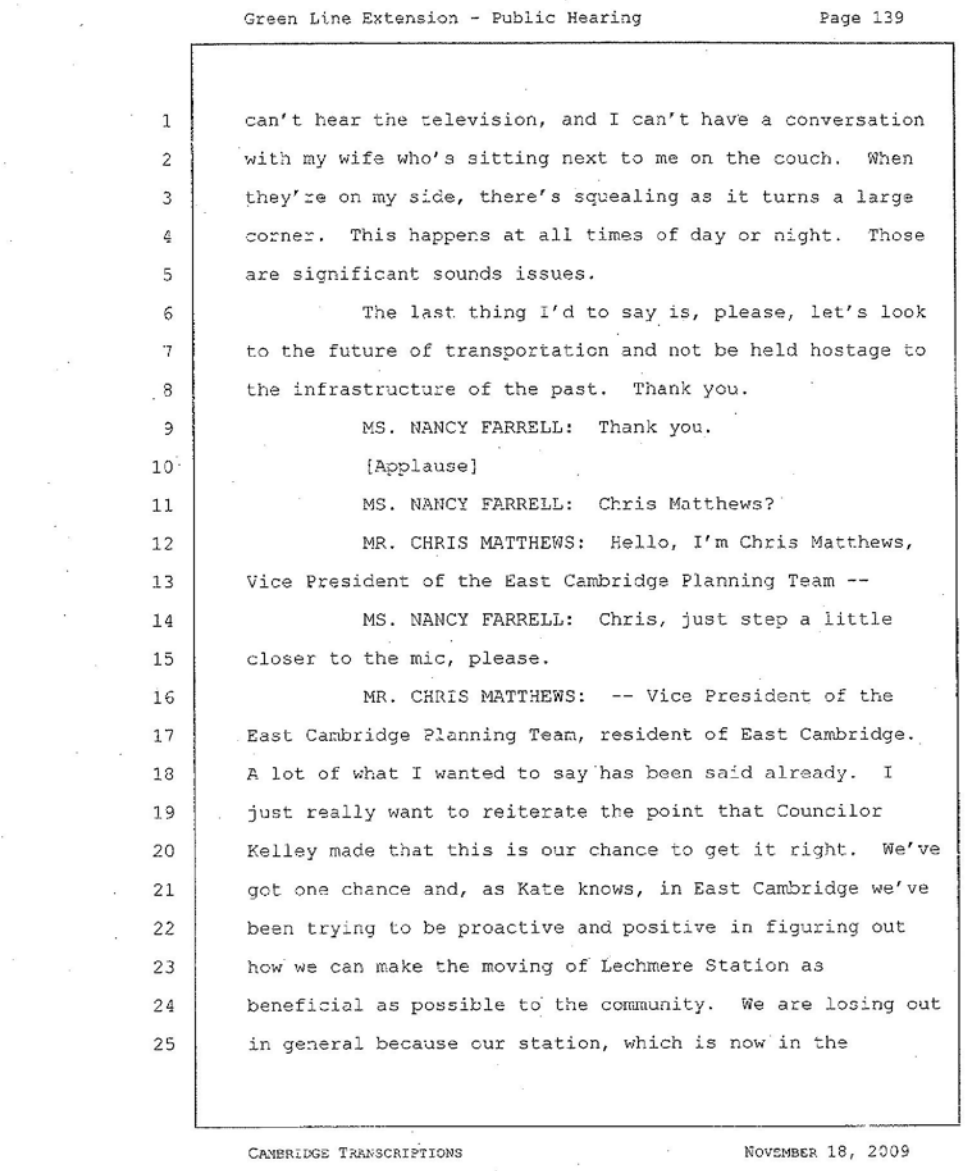
Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

I-001-137

The Green Line Extension would be compatible with the existing MBTA Green Line network. This light rail network uses a steel wheel technology.

I-001-138

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent



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can't hear the television, and I can't have a conversation with my wife who's sitting next to me on the couch. When they're on my side, there's squealing as it turns a large corner. This happens at all times of day or night. Those are significant sounds issues.

The last thing I'd to say is, please, let's look to the future of transportation and not be held hostage to the infrastructure of the past. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Chris Matthews?

MR. CHRIS MATTHEWS: Hello, I'm Chris Matthews, Vice President of the East Cambridge Planning Team --

MS. NANCY FARRELL: Chris, just step a little closer to the mic, please.

MR. CHRIS MATTHEWS: -- Vice President of the East Cambridge Planning Team, resident of East Cambridge. A lot of what I wanted to say has been said already. I just really want to reiterate the point that Councilor Kelley made that this is our chance to get it right. We've got one chance and, as Kate knows, in East Cambridge we've been trying to be proactive and positive in figuring out how we can make the moving of Lechmere Station as beneficial as possible to the community. We are losing out in general because our station, which is now in the

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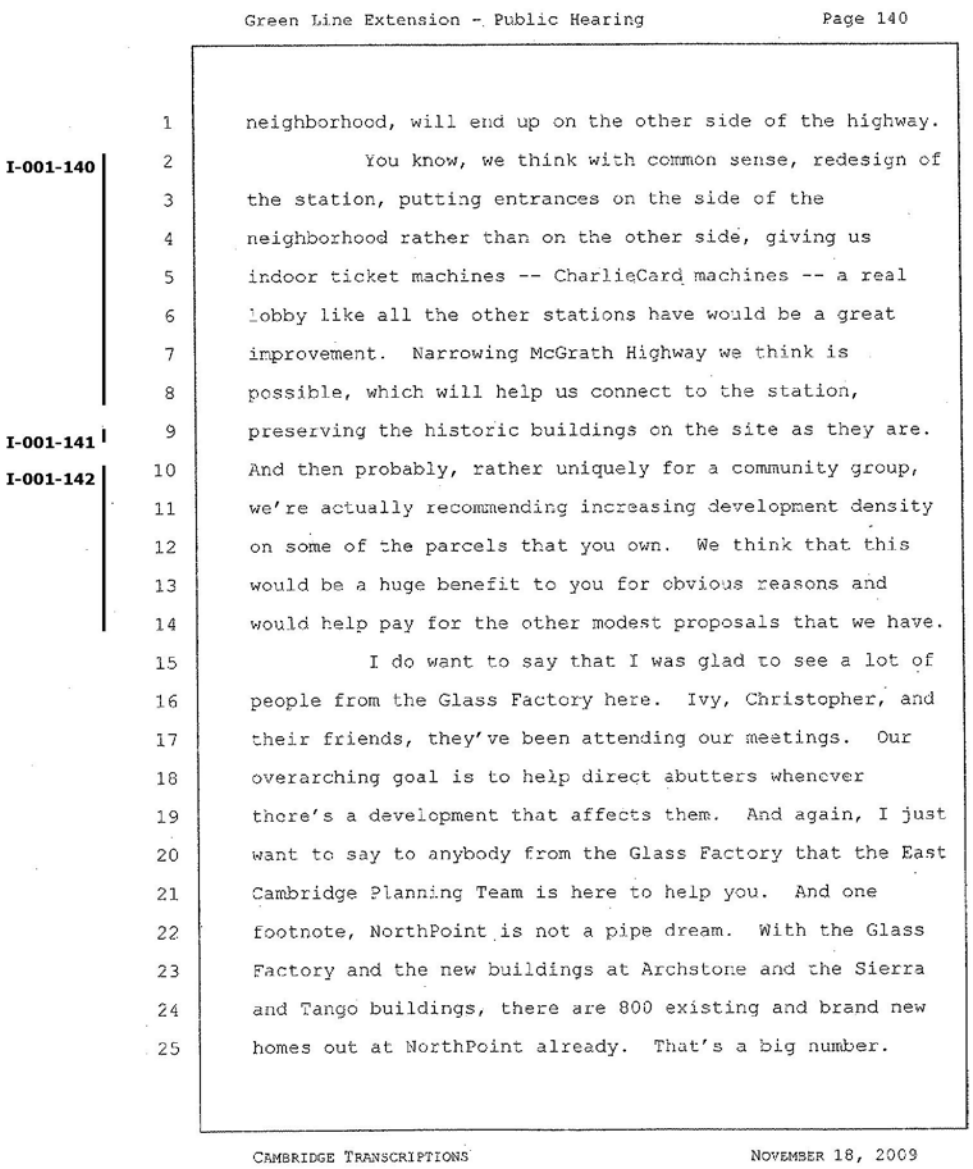
of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

I-001-139

DEIR/EA Sections 5.7, Noise, and 5.8, Vibration, describe the noise and vibration impacts, respectively, expected from the Project. Pursuant to FTA-established guidelines, these impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments, describes the mitigation measures that would be implemented to eliminate, minimize, or offset impacts above regulatory thresholds.



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neighborhood, will end up on the other side of the highway.

You know, we think with common sense, redesign of the station, putting entrances on the side of the neighborhood rather than on the other side, giving us indoor ticket machines -- CharlieCard machines -- a real lobby like all the other stations have would be a great improvement. Narrowing McGrath Highway we think is possible, which will help us connect to the station, preserving the historic buildings on the site as they are. And then probably, rather uniquely for a community group, we're actually recommending increasing development density on some of the parcels that you own. We think that this would be a huge benefit to you for obvious reasons and would help pay for the other modest proposals that we have.

I do want to say that I was glad to see a lot of people from the Glass Factory here. Ivy, Christopher, and their friends, they've been attending our meetings. Our overarching goal is to help direct abutters whenever there's a development that affects them. And again, I just want to say to anybody from the Glass Factory that the East Cambridge Planning Team is here to help you. And one footnote, NorthPoint is not a pipe dream. With the Glass Factory and the new buildings at Archstone and the Sierra and Tango buildings, there are 800 existing and brand new homes out at NorthPoint already. That's a big number.

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I-001-140

I-001-141

I-001-142

I-001-140

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-001-141

Reducing the width of the McGrath Highway is not part of the Green Line Extension Project. As described in Chapter 5, Lechmere Station, MassDOT will prepare the current Lechmere Station site for redevelopment once the station has been relocated.

I-001-142

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: The next few speakers are Shi Shen Yang, David Dahlbacka, and Jared Ingersoll. Any of those people here? Okay. Who of the -- David? Come on up. David, you and I used to work together. See, I'm so memorable.

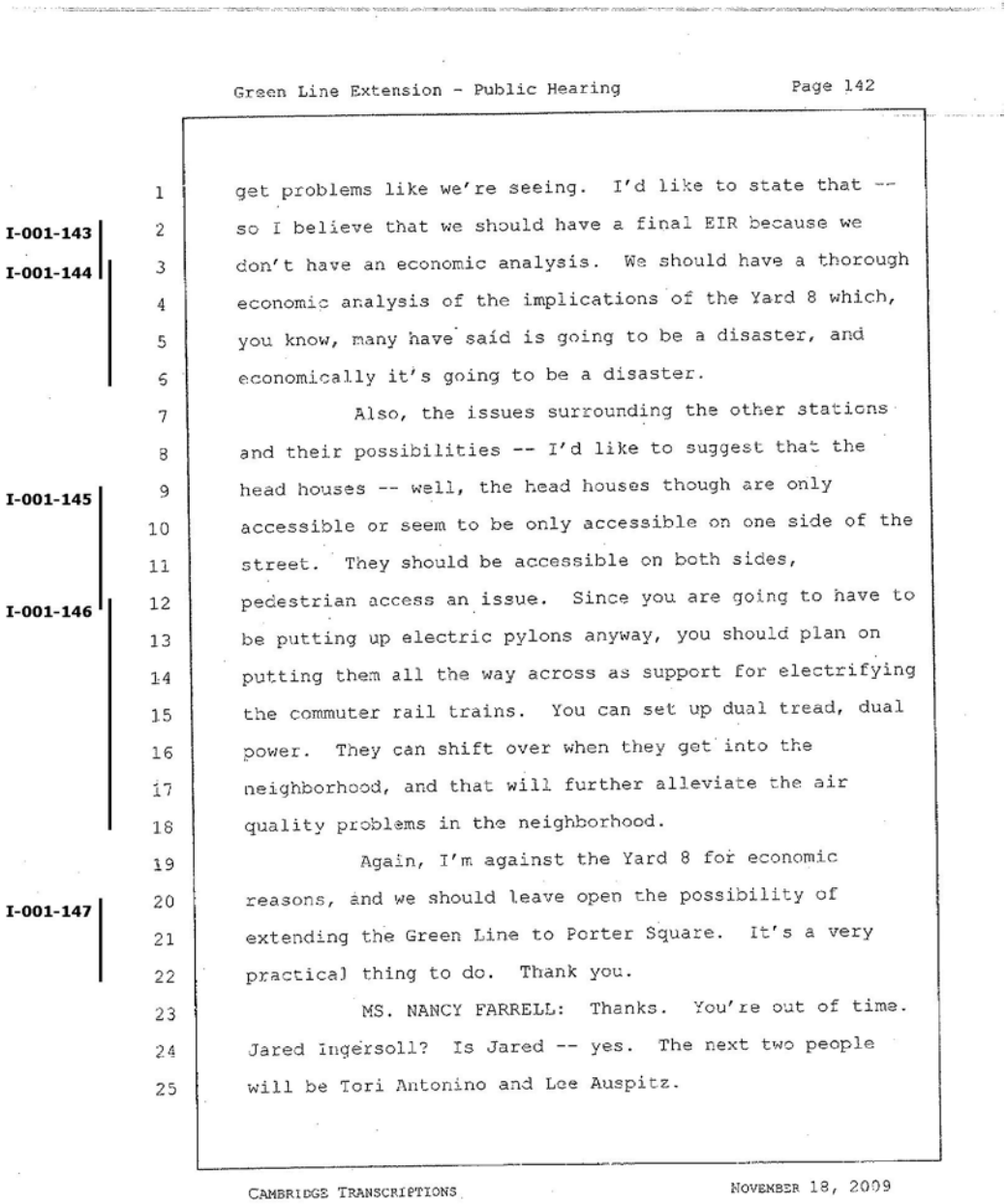
[Laughter]

MR. DAVID DAHLBACKA: Well, we'll have a talk afterwards.

MS. NANCY FARRELL: Okay.

MR. DAVID DAHLBACKA: Okay. I wanted to say, first of all, that I've been in favor of the Green Line Extension since I first heard of it. I've thought it was a very, very good idea. There are some issues I had with the DEIR's minimizing of the economic contribution. The attitude was that it would not actually stimulate economic growth, it would merely change its location and, considering what happened in Davis Square, that's not a realistic description.

What I've been hearing and what I've read in the DEIR says that this is a case of engineering out where the Green Line, the MBTA, decided that they were going to do their operational thing. That's engineering out and, when you do that first without getting community input, you can



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get problems like we're seeing. I'd like to state that -- so I believe that we should have a final EIR because we don't have an economic analysis. We should have a thorough economic analysis of the implications of the Yard 8 which, you know, many have said is going to be a disaster, and economically it's going to be a disaster.

Also, the issues surrounding the other stations and their possibilities -- I'd like to suggest that the head houses -- well, the head houses though are only accessible or seem to be only accessible on one side of the street. They should be accessible on both sides, pedestrian access an issue. Since you are going to have to be putting up electric pylons anyway, you should plan on putting them all the way across as support for electrifying the commuter rail trains. You can set up dual tread, dual power. They can shift over when they get into the neighborhood, and that will further alleviate the air quality problems in the neighborhood.

Again, I'm against the Yard 8 for economic reasons, and we should leave open the possibility of extending the Green Line to Porter Square. It's a very practical thing to do. Thank you.

MS. NANCY FARRELL: Thanks. You're out of time. Jared Ingersoll? Is Jared -- yes. The next two people will be Tori Antonino and Lee Auspitz.

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I-001-143

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

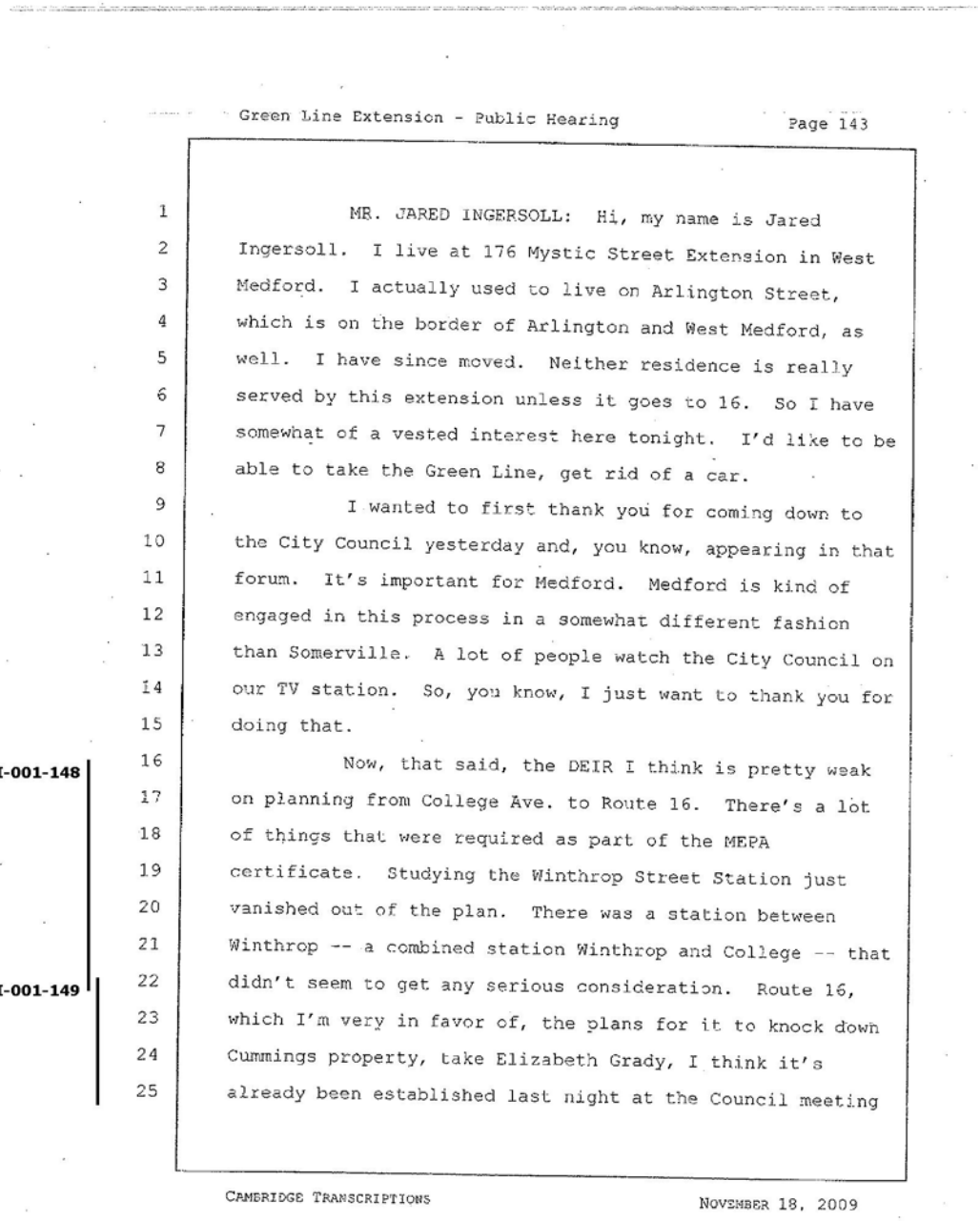
I-001-144

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-145

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



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MR. JARED INGERSOLL: Hi, my name is Jared Ingersoll. I live at 176 Mystic Street Extension in West Medford. I actually used to live on Arlington Street, which is on the border of Arlington and West Medford, as well. I have since moved. Neither residence is really served by this extension unless it goes to 16. So I have somewhat of a vested interest here tonight. I'd like to be able to take the Green Line, get rid of a car.

I wanted to first thank you for coming down to the City Council yesterday and, you know, appearing in that forum. It's important for Medford. Medford is kind of engaged in this process in a somewhat different fashion than Somerville. A lot of people watch the City Council on our TV station. So, you know, I just want to thank you for doing that.

I-001-148

Now, that said, the DEIR I think is pretty weak on planning from College Ave. to Route 16. There's a lot of things that were required as part of the MEPA certificate. Studying the Winthrop Street Station just vanished out of the plan. There was a station between Winthrop -- a combined station Winthrop and College -- that

I-001-149

didn't seem to get any serious consideration. Route 16, which I'm very in favor of, the plans for it to knock down Cummings property, take Elizabeth Grady, I think it's already been established last night at the Council meeting

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I-001-146

The potential future electrification of MBTA Commuter Rail lines in the Study Area is beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail.

I-001-147

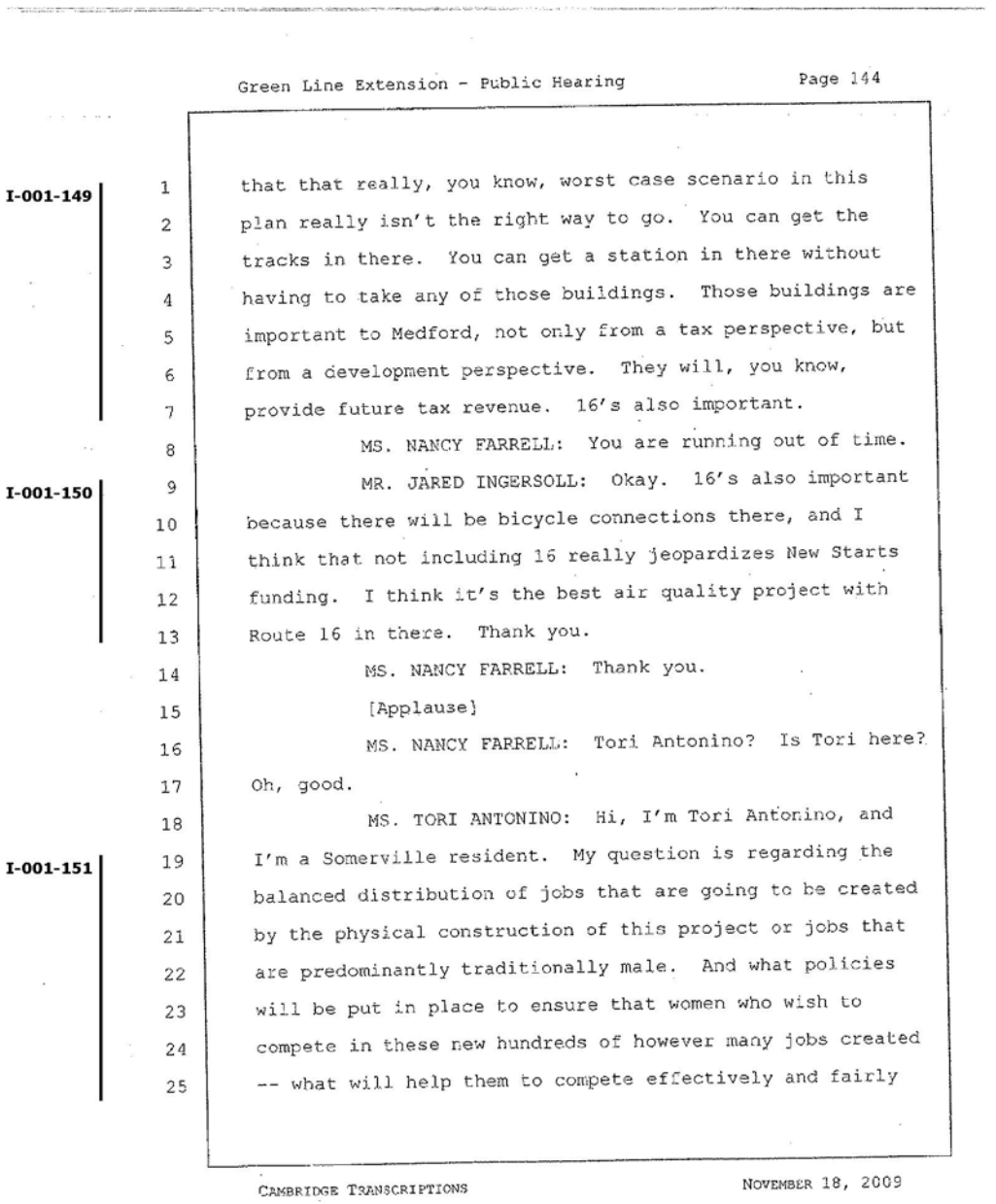
As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-001-148

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

I-001-149

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



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I-001-149

that that really, you know, worst case scenario in this plan really isn't the right way to go. You can get the tracks in there. You can get a station in there without having to take any of those buildings. Those buildings are important to Medford, not only from a tax perspective, but from a development perspective. They will, you know, provide future tax revenue. 16's also important.

MS. NANCY FARRELL: You are running out of time.

I-001-150

MR. JARED INGERSOLL: Okay. 16's also important because there will be bicycle connections there, and I think that not including 16 really jeopardizes New Starts funding. I think it's the best air quality project with Route 16 in there. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Tori Antonino? Is Tori here? Oh, good.

I-001-151

MS. TORI ANTONINO: Hi, I'm Tori Antonino, and I'm a Somerville resident. My question is regarding the balanced distribution of jobs that are going to be created by the physical construction of this project or jobs that are predominantly traditionally male. And what policies will be put in place to ensure that women who wish to compete in these new hundreds of however many jobs created -- what will help them to compete effectively and fairly

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I-001-150

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-001-151

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. As required by the Secretary's Certificate on the DEIR/EA, additional analyses of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A project workshop series will provide an opportunity to discuss broader impacts of the project on job creation, economic development, housing affordability, and other community impacts.

I-001-151

for these jobs? What might the policy makers effect? Shall we like raise Rosie the Riveter or --

MS. NANCY FARRELL: Maybe you didn't come in in the beginning. We're not answering questions tonight, but we will answer your question in writing.

MS. TORI ANTONINO: Oh, can it be a rhetorical --

MS. NANCY FARRELL: Oh, no, it should be answered. It should be a real question.

MS. TORI ANTONINO: I mean, but can you -- all right.

MS. NANCY FARRELL: But we can't answer it tonight because tonight we're just listening.

MS. TORI ANTONINO: All right. Well, there it is.

MS. NANCY FARRELL: Okay. Thank you.

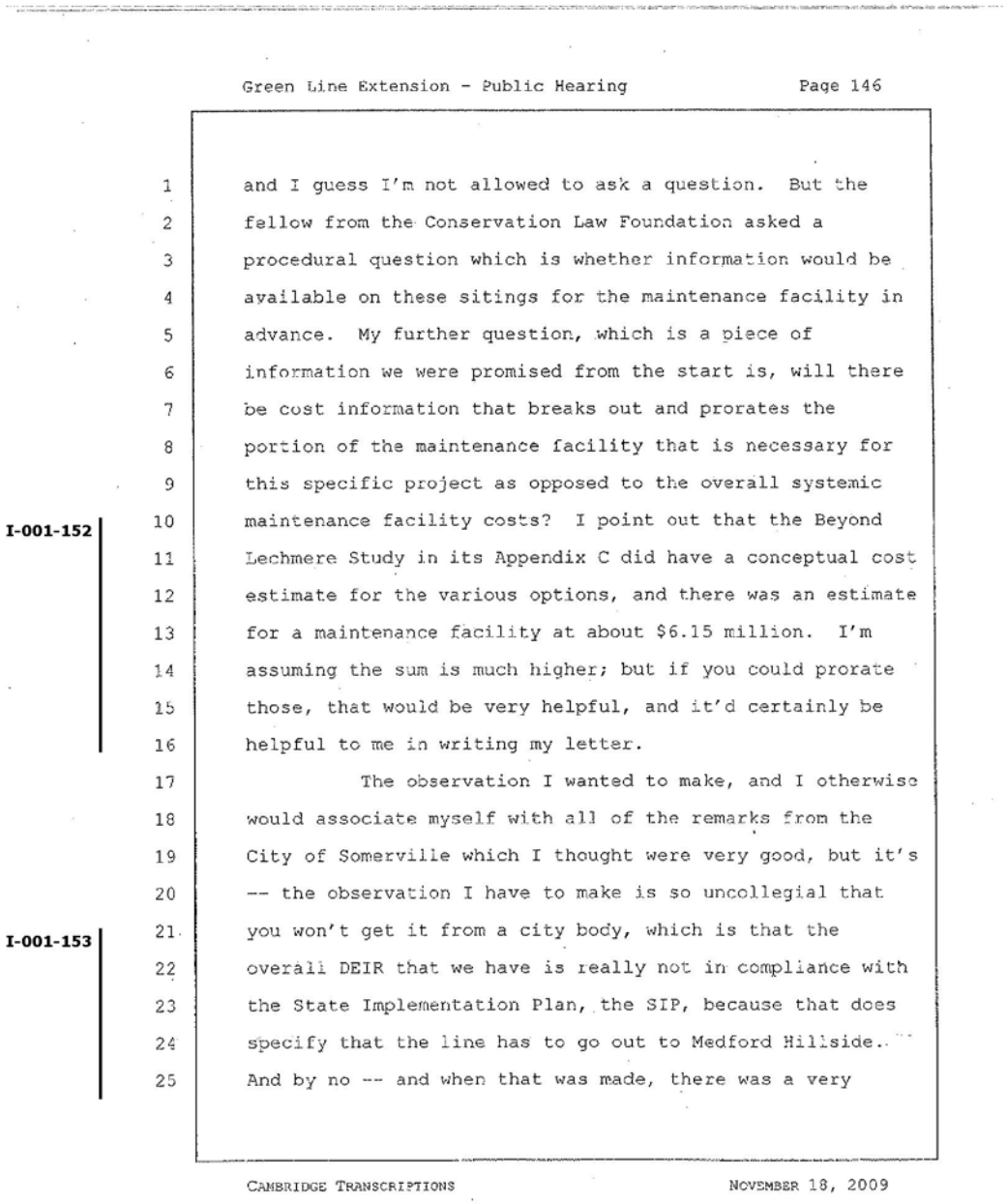
MS. TORI ANTONINO: I'll write a letter.

MS. NANCY FARRELL: Okay. Great.

MS. TORI ANTONINO: Thanks.

MS. NANCY FARRELL: No -- well, okay. Thank you. Lee?

MR. LEE AUSPITZ: I'm Lee Auspitz. I've been on the Citizen Advisory Committee for this project and for the precursor project, Beyond Lechmere Study. And I guess the Mayor honored me with these appointments because I had also been involved in the Davis Square activity for a long time,



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and I guess I'm not allowed to ask a question. But the fellow from the Conservation Law Foundation asked a procedural question which is whether information would be available on these sitings for the maintenance facility in advance. My further question, which is a piece of information we were promised from the start is, will there be cost information that breaks out and prorates the portion of the maintenance facility that is necessary for this specific project as opposed to the overall systemic maintenance facility costs? I point out that the Beyond Lechmere Study in its Appendix C did have a conceptual cost estimate for the various options, and there was an estimate for a maintenance facility at about $6.15 million. I'm assuming the sum is much higher; but if you could prorate those, that would be very helpful, and it'd certainly be helpful to me in writing my letter.

I-001-152

The observation I wanted to make, and I otherwise would associate myself with all of the remarks from the City of Somerville which I thought were very good, but it's -- the observation I have to make is so uncollegial that you won't get it from a city body, which is that the overall DEIR that we have is really not in compliance with the State Implementation Plan, the SIP, because that does specify that the line has to go out to Medford Hillside. And by no -- and when that was made, there was a very

I-001-153

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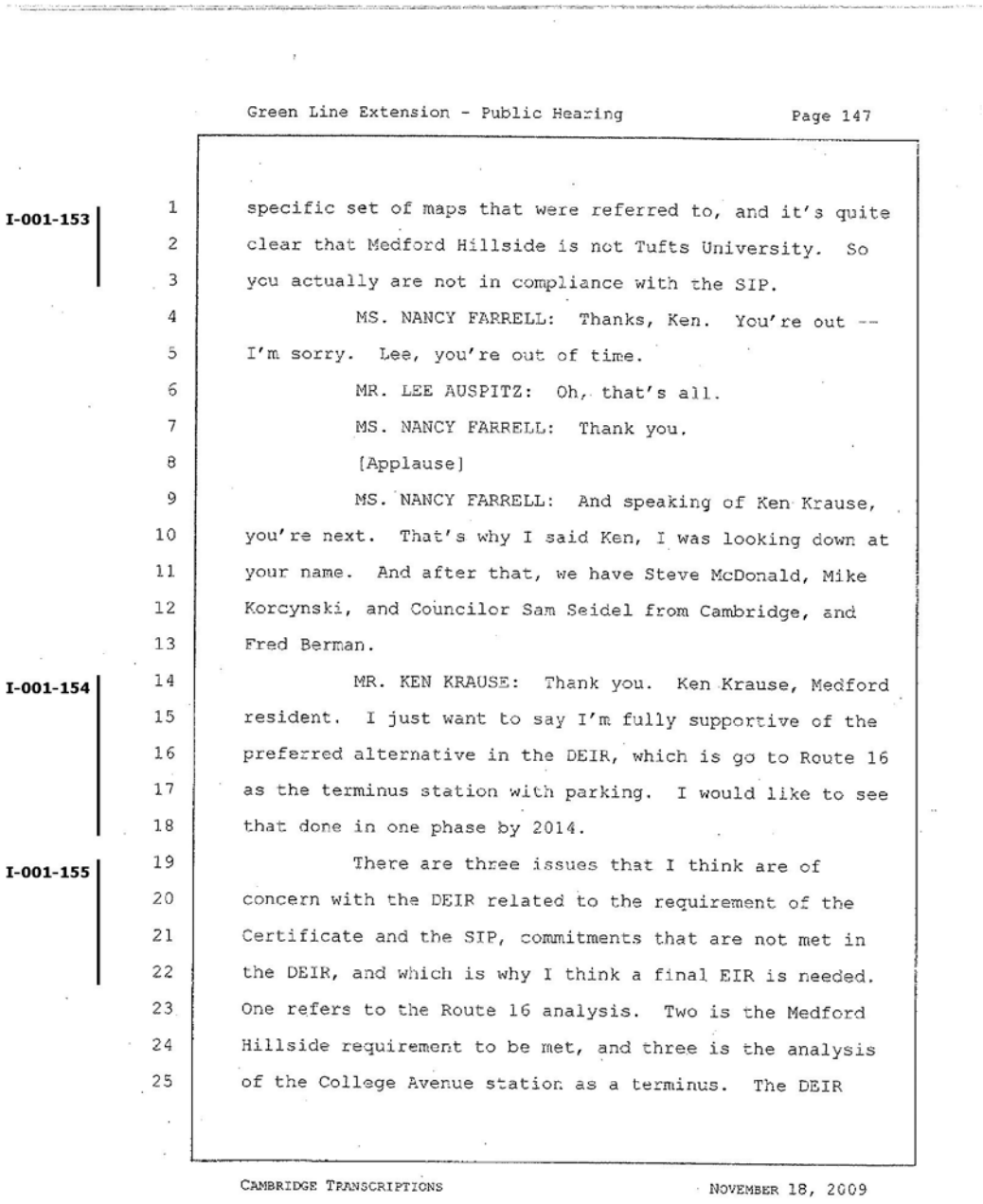
I-001-152

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-001-153

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.



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I-001-153

specific set of maps that were referred to, and it's quite clear that Medford Hillside is not Tufts University. So you actually are not in compliance with the SIP.

MS. NANCY FARRELL: Thanks, Ken. You're out -- I'm sorry. Lee, you're out of time.

MR. LEE AUSPITZ: Oh, that's all.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: And speaking of Ken Krause, you're next. That's why I said Ken, I was looking down at your name. And after that, we have Steve McDonald, Mike Korcynski, and Councilor Sam Seidel from Cambridge, and Fred Berman.

I-001-154

MR. KEN KRAUSE: Thank you. Ken Krause, Medford resident. I just want to say I'm fully supportive of the preferred alternative in the DEIR, which is go to Route 16 as the terminus station with parking. I would like to see that done in one phase by 2014.

I-001-155

There are three issues that I think are of concern with the DEIR related to the requirement of the Certificate and the SIP, commitments that are not met in the DEIR, and which is why I think a final EIR is needed. One refers to the Route 16 analysis. Two is the Medford Hillside requirement to be met, and three is the analysis of the College Avenue station as a terminus. The DEIR

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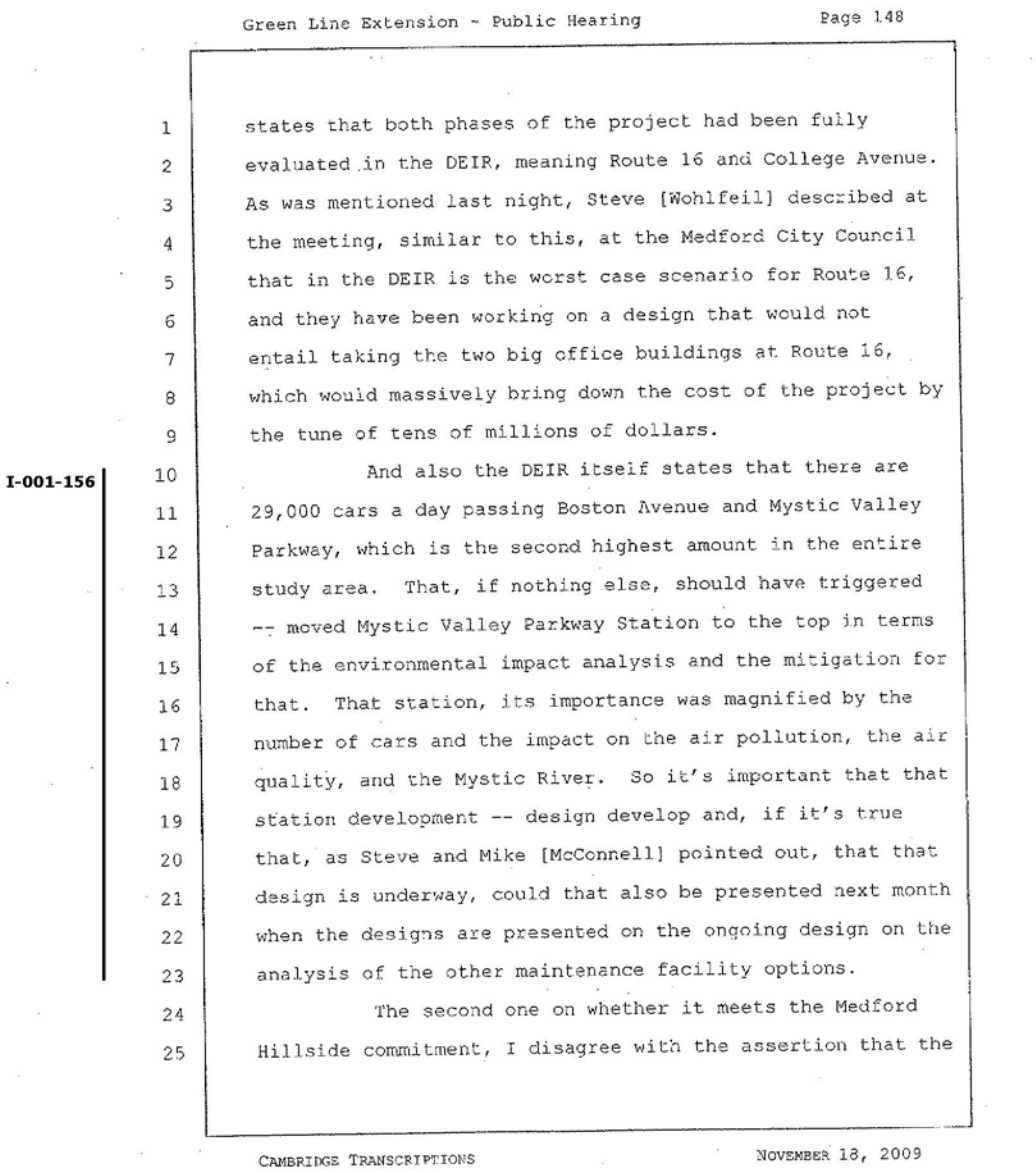
I-001-154

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-001-155

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.



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states that both phases of the project had been fully evaluated in the DEIR, meaning Route 16 and College Avenue. As was mentioned last night, Steve [Wohlfeil] described at the meeting, similar to this, at the Medford City Council that in the DEIR is the worst case scenario for Route 16, and they have been working on a design that would not entail taking the two big office buildings at Route 16, which would massively bring down the cost of the project by the tune of tens of millions of dollars.

I-001-156

And also the DEIR itself states that there are 29,000 cars a day passing Boston Avenue and Mystic Valley Parkway, which is the second highest amount in the entire study area. That, if nothing else, should have triggered -- moved Mystic Valley Parkway Station to the top in terms of the environmental impact analysis and the mitigation for that. That station, its importance was magnified by the number of cars and the impact on the air pollution, the air quality, and the Mystic River. So it's important that that station development -- design develop and, if it's true that, as Steve and Mike [McConnell] pointed out, that that design is underway, could that also be presented next month when the designs are presented on the ongoing design on the analysis of the other maintenance facility options.

The second one on whether it meets the Medford Hillside commitment, I disagree with the assertion that the

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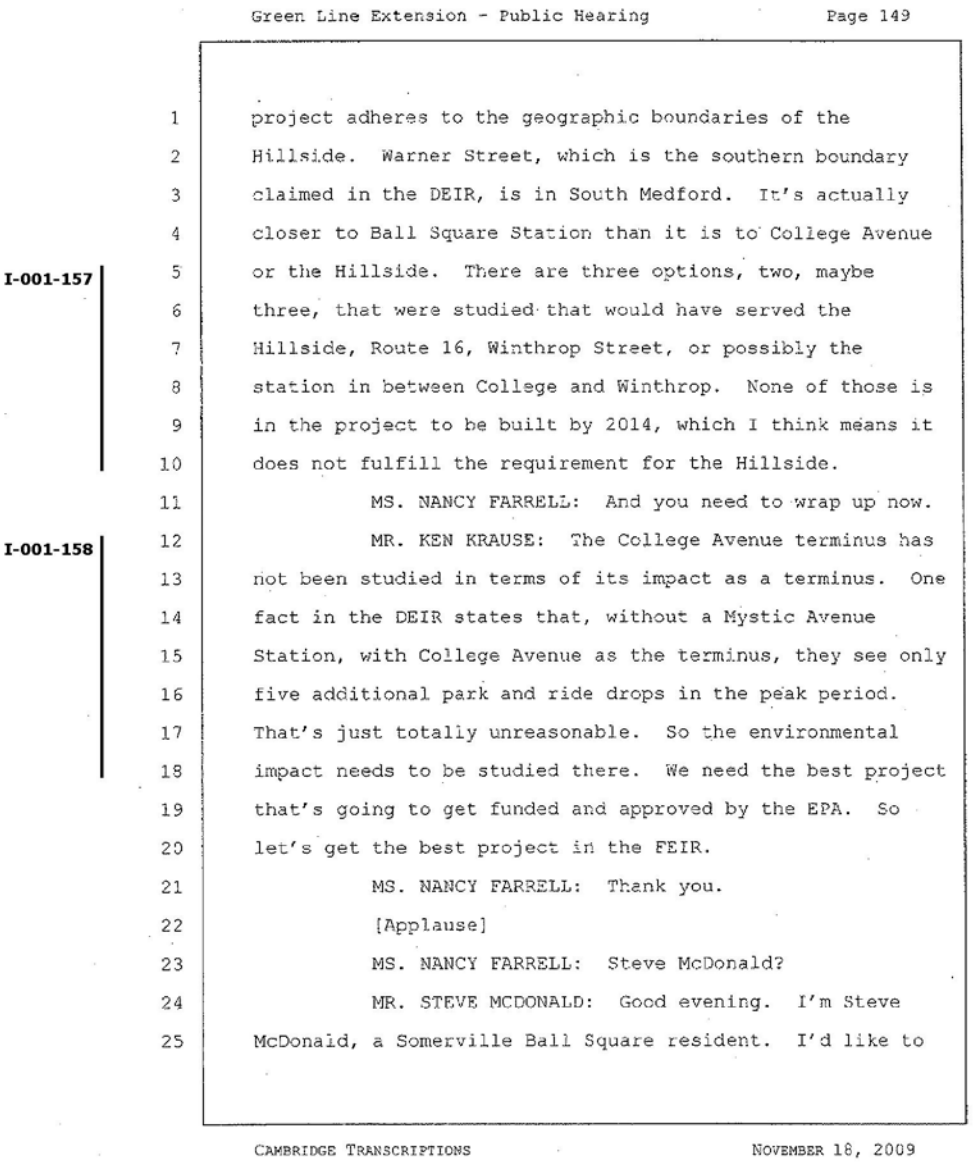
As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (MassDEP DEIR/EA comment letter, January 8, 2010).



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project adheres to the geographic boundaries of the Hillside. Warner Street, which is the southern boundary claimed in the DEIR, is in South Medford. It's actually closer to Ball Square Station than it is to College Avenue or the Hillside. There are three options, two, maybe three, that were studied that would have served the Hillside, Route 16, Winthrop Street, or possibly the station in between College and Winthrop. None of those is in the project to be built by 2014, which I think means it does not fulfill the requirement for the Hillside.

MS. NANCY FARRELL: And you need to wrap up now.

MR. KEN KRAUSE: The College Avenue terminus has not been studied in terms of its impact as a terminus. One fact in the DEIR states that, without a Mystic Avenue Station, with College Avenue as the terminus, they see only five additional park and ride drops in the peak period. That's just totally unreasonable. So the environmental impact needs to be studied there. We need the best project that's going to get funded and approved by the EPA. So let's get the best project in the FEIR.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Steve McDonald?

MR. STEVE MCDONALD: Good evening. I'm Steve McDonald, a Somerville Ball Square resident. I'd like to

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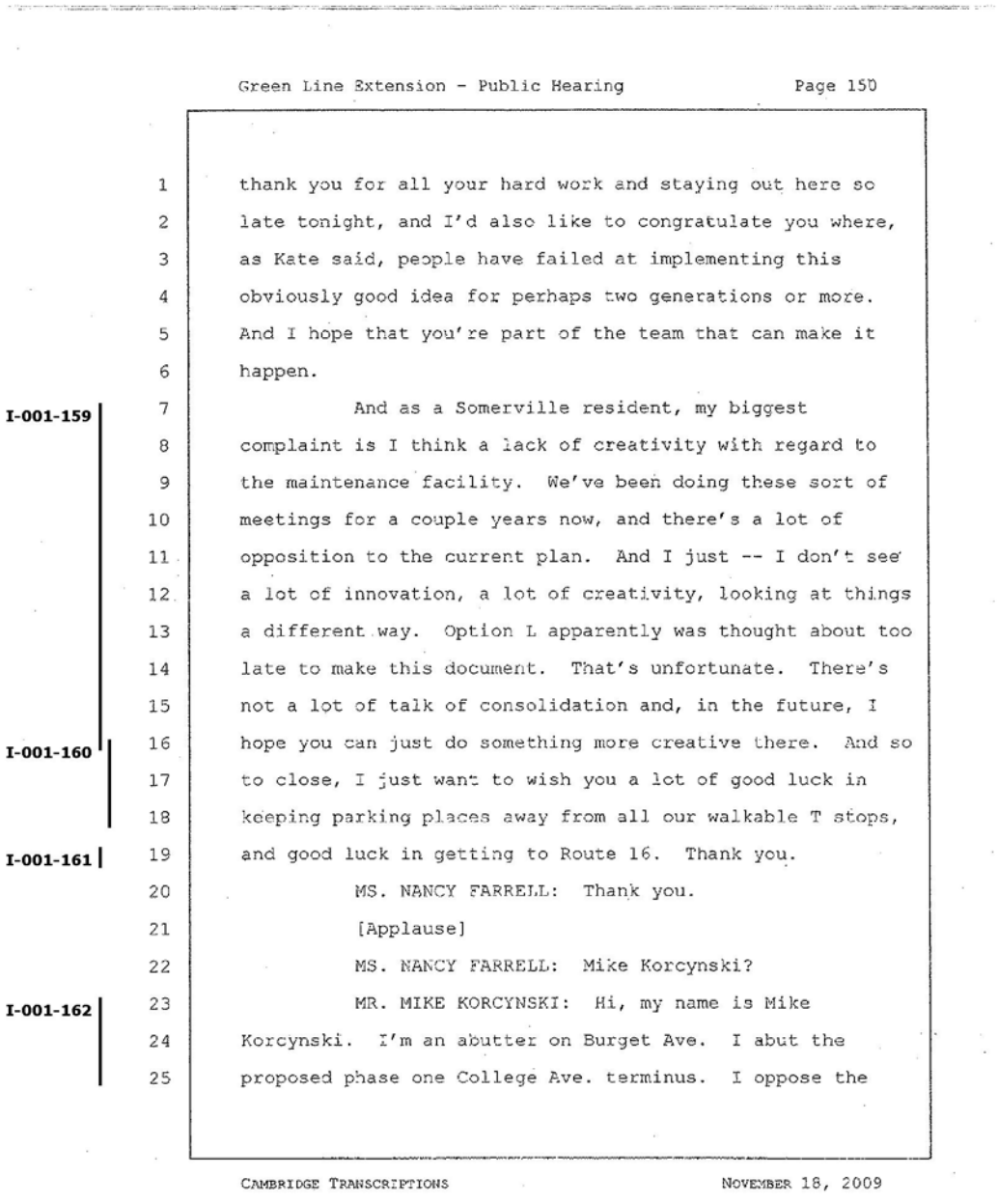
I-001-157

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-001-158

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.



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thank you for all your hard work and staying out here so late tonight, and I'd also like to congratulate you where, as Kate said, people have failed at implementing this obviously good idea for perhaps two generations or more. And I hope that you're part of the team that can make it happen.

I-001-159 And as a Somerville resident, my biggest complaint is I think a lack of creativity with regard to the maintenance facility. We've been doing these sort of meetings for a couple years now, and there's a lot of opposition to the current plan. And I just -- I don't see a lot of innovation, a lot of creativity, looking at things a different way. Option L apparently was thought about too late to make this document. That's unfortunate. There's not a lot of talk of consolidation and, in the future, I

I-001-160 hope you can just do something more creative there. And so to close, I just want to wish you a lot of good luck in keeping parking places away from all our walkable T stops,

I-001-161 and good luck in getting to Route 16. Thank you.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Mike Korcynski?

I-001-162 MR. MIKE KORCYNSKI: Hi, my name is Mike Korcynski. I'm an abutter on Burget Ave. I abut the proposed phase one College Ave. terminus. I oppose the

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I-001-159

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-001-160

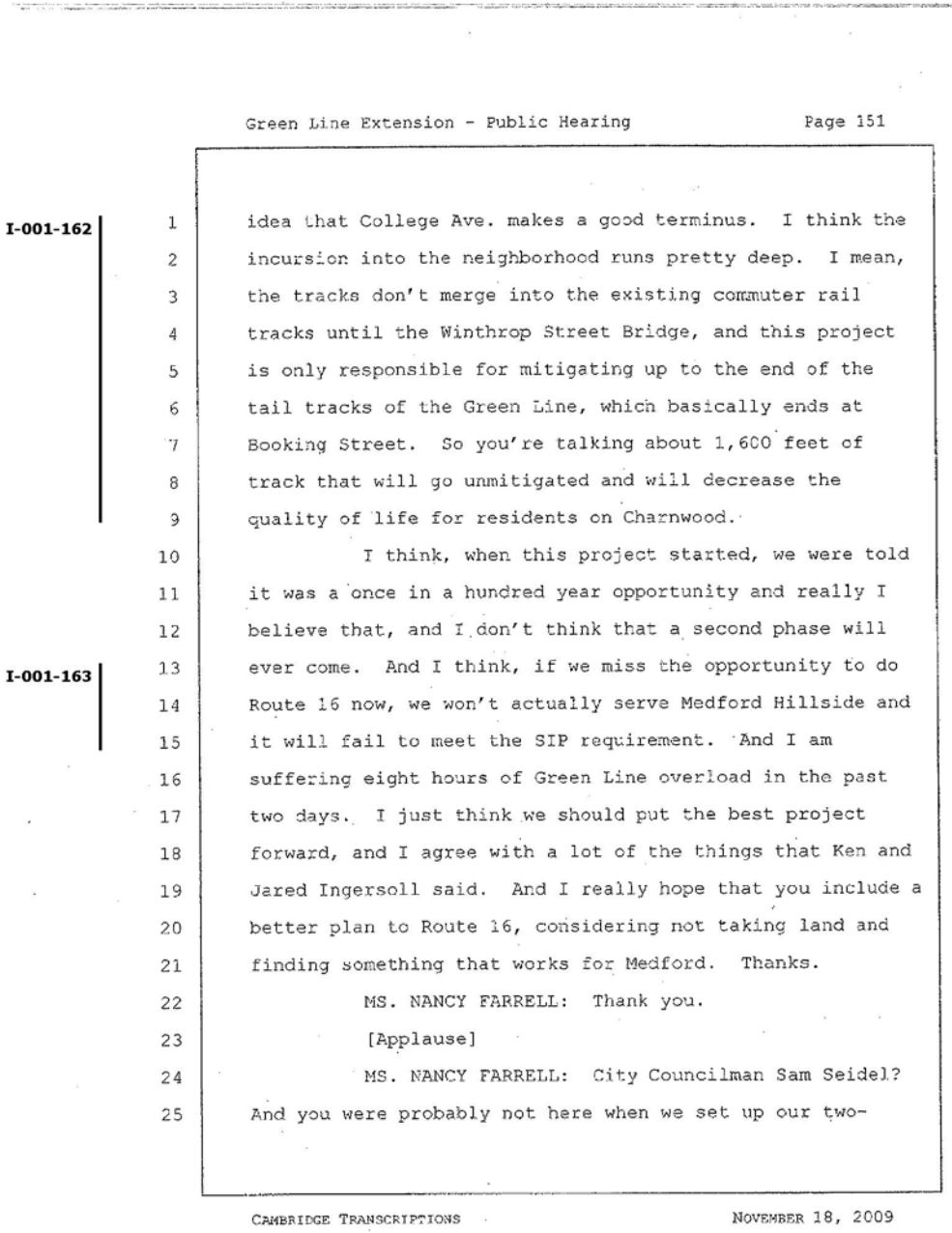
The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-001-161

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-001-162

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.



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I-001-162

idea that College Ave. makes a good terminus. I think the incursion into the neighborhood runs pretty deep. I mean, the tracks don't merge into the existing commuter rail tracks until the Winthrop Street Bridge, and this project is only responsible for mitigating up to the end of the tail tracks of the Green Line, which basically ends at Booking Street. So you're talking about 1,600 feet of track that will go unmitigated and will decrease the quality of life for residents on Charnwood.

I think, when this project started, we were told it was a once in a hundred year opportunity and really I believe that, and I don't think that a second phase will

I-001-163

ever come. And I think, if we miss the opportunity to do Route 16 now, we won't actually serve Medford Hillside and it will fail to meet the SIP requirement. And I am suffering eight hours of Green Line overload in the past two days. I just think we should put the best project forward, and I agree with a lot of the things that Ken and Jared Ingersoll said. And I really hope that you include a better plan to Route 16, considering not taking land and finding something that works for Medford. Thanks.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: City Councilman Sam Seidel? And you were probably not here when we set up our two-

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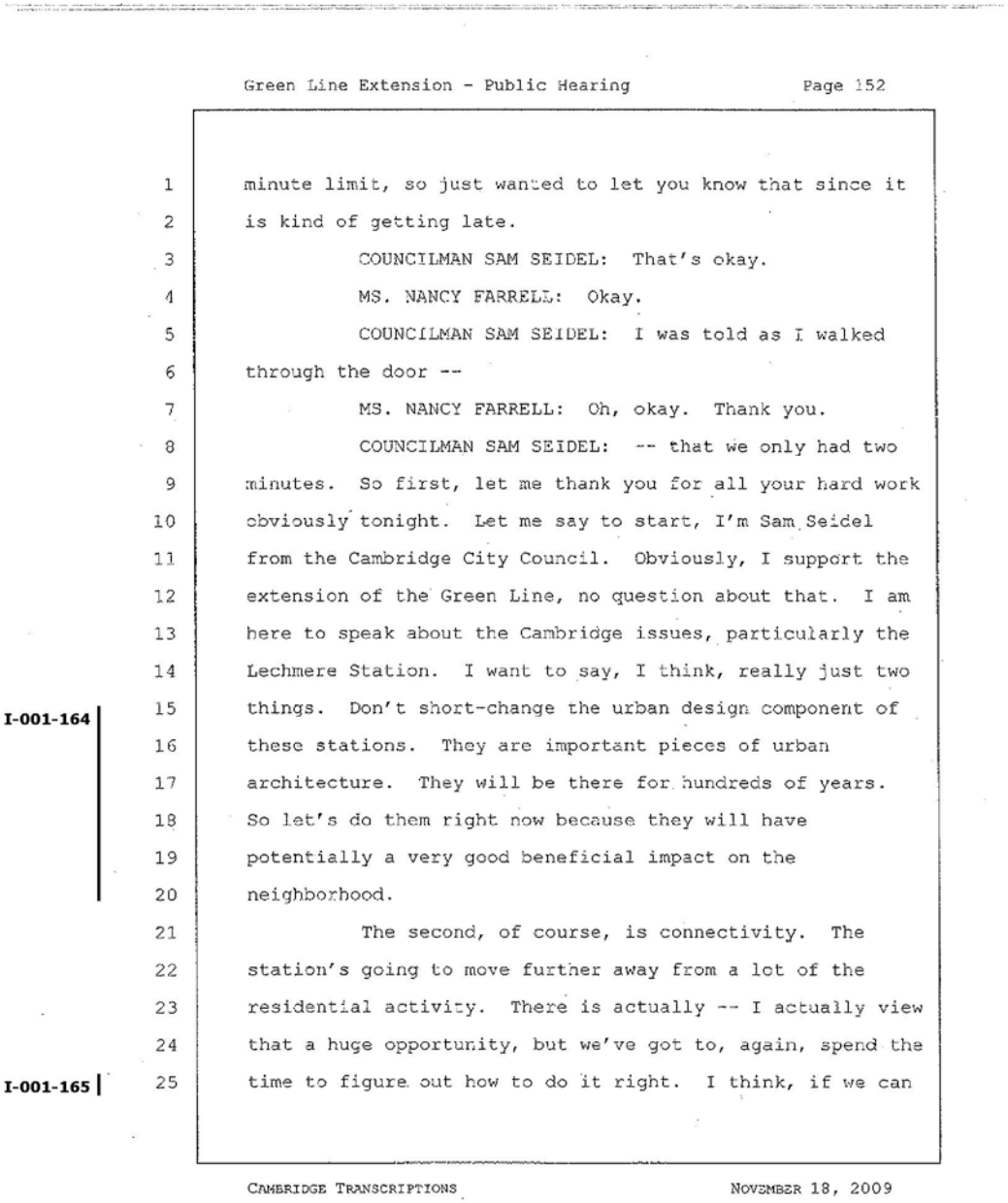
I-001-163

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.



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minute limit, so just wanted to let you know that since it is kind of getting late.

COUNCILMAN SAM SEIDEL: That's okay.

MS. NANCY FARRELL: Okay.

COUNCILMAN SAM SEIDEL: I was told as I walked through the door --

MS. NANCY FARRELL: Oh, okay. Thank you.

COUNCILMAN SAM SEIDEL: -- that we only had two minutes. So first, let me thank you for all your hard work obviously tonight. Let me say to start, I'm Sam Seidel from the Cambridge City Council. Obviously, I support the extension of the Green Line, no question about that. I am here to speak about the Cambridge issues, particularly the Lechmere Station. I want to say, I think, really just two things. Don't short-change the urban design component of these stations. They are important pieces of urban architecture. They will be there for hundreds of years. So let's do them right now because they will have potentially a very good beneficial impact on the neighborhood.

The second, of course, is connectivity. The station's going to move further away from a lot of the residential activity. There is actually -- I actually view that a huge opportunity, but we've got to, again, spend the time to figure out how to do it right. I think, if we can

I-001-164

I-001-165

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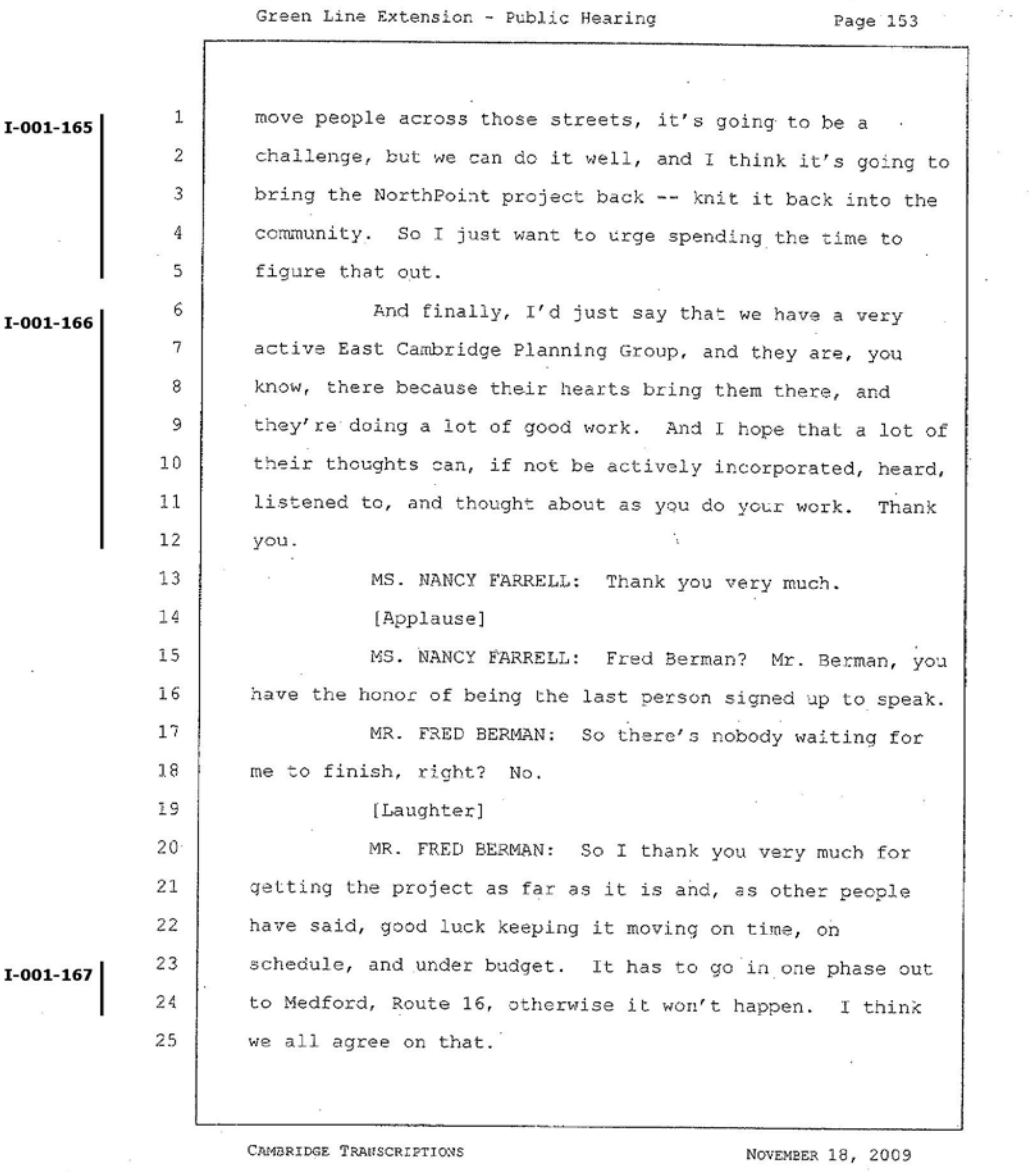
I-001-164

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-001-165

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.



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move people across those streets, it's going to be a challenge, but we can do it well, and I think it's going to bring the NorthPoint project back -- knit it back into the community. So I just want to urge spending the time to figure that out.

And finally, I'd just say that we have a very active East Cambridge Planning Group, and they are, you know, there because their hearts bring them there, and they're doing a lot of good work. And I hope that a lot of their thoughts can, if not be actively incorporated, heard, listened to, and thought about as you do your work. Thank you.

MS. NANCY FARRELL: Thank you very much.

[Applause]

MS. NANCY FARRELL: Fred Berman? Mr. Berman, you have the honor of being the last person signed up to speak.

MR. FRED BERMAN: So there's nobody waiting for me to finish, right? No.

[Laughter]

MR. FRED BERMAN: So I thank you very much for getting the project as far as it is and, as other people have said, good luck keeping it moving on time, on schedule, and under budget. It has to go in one phase out to Medford, Route 16, otherwise it won't happen. I think we all agree on that.

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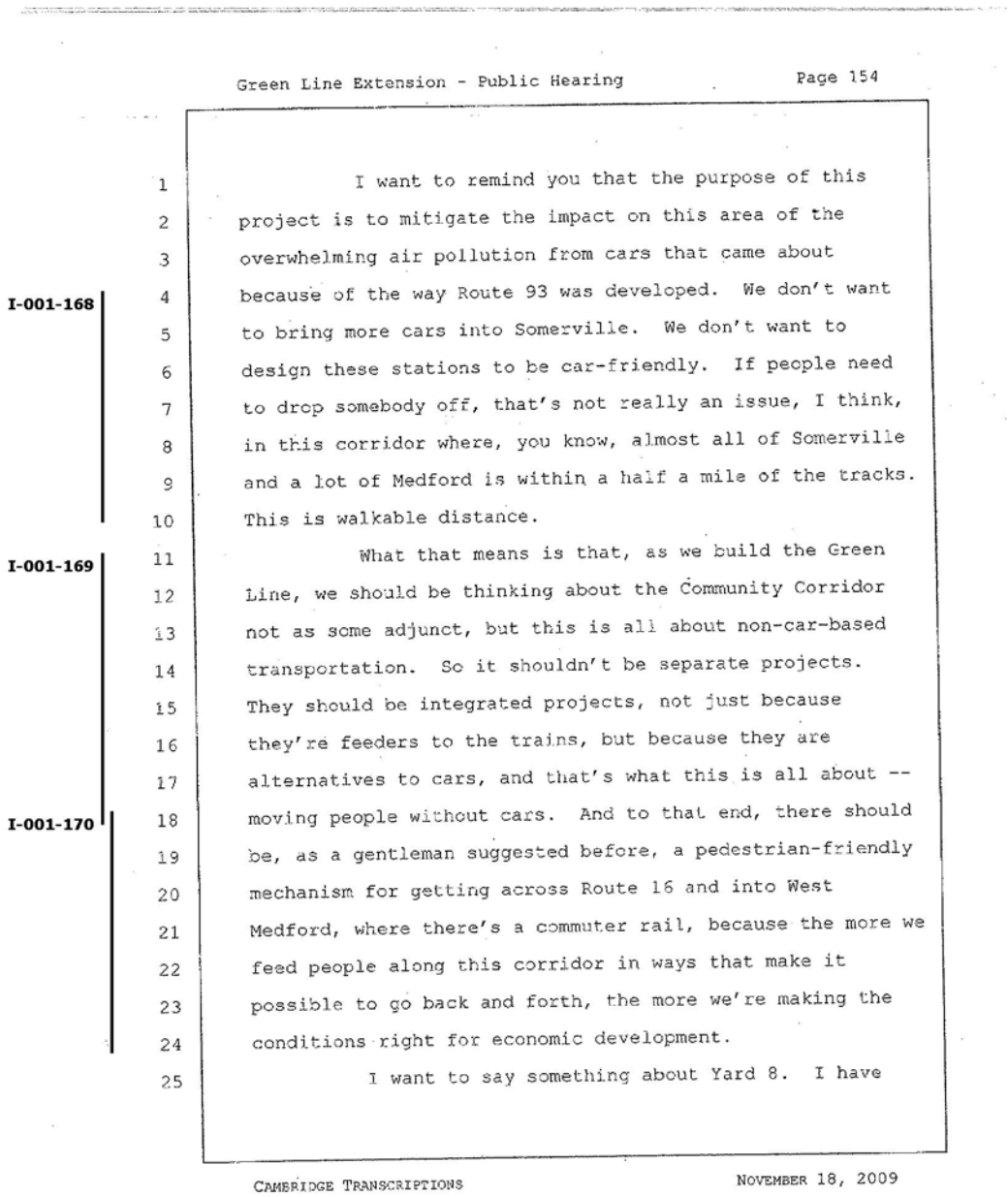
I-001-166

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-167

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



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I-001-168 I want to remind you that the purpose of this project is to mitigate the impact on this area of the overwhelming air pollution from cars that came about because of the way Route 93 was developed. We don't want to bring more cars into Somerville. We don't want to design these stations to be car-friendly. If people need to drop somebody off, that's not really an issue, I think, in this corridor where, you know, almost all of Somerville and a lot of Medford is within a half a mile of the tracks. This is walkable distance.

I-001-169 What that means is that, as we build the Green Line, we should be thinking about the Community Corridor not as some adjunct, but this is all about non-car-based transportation. So it shouldn't be separate projects. They should be integrated projects, not just because they're feeders to the trains, but because they are alternatives to cars, and that's what this is all about --

I-001-170 moving people without cars. And to that end, there should be, as a gentleman suggested before, a pedestrian-friendly mechanism for getting across Route 16 and into West Medford, where there's a commuter rail, because the more we feed people along this corridor in ways that make it possible to go back and forth, the more we're making the conditions right for economic development.

I want to say something about Yard 8. I have

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I-001-168

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

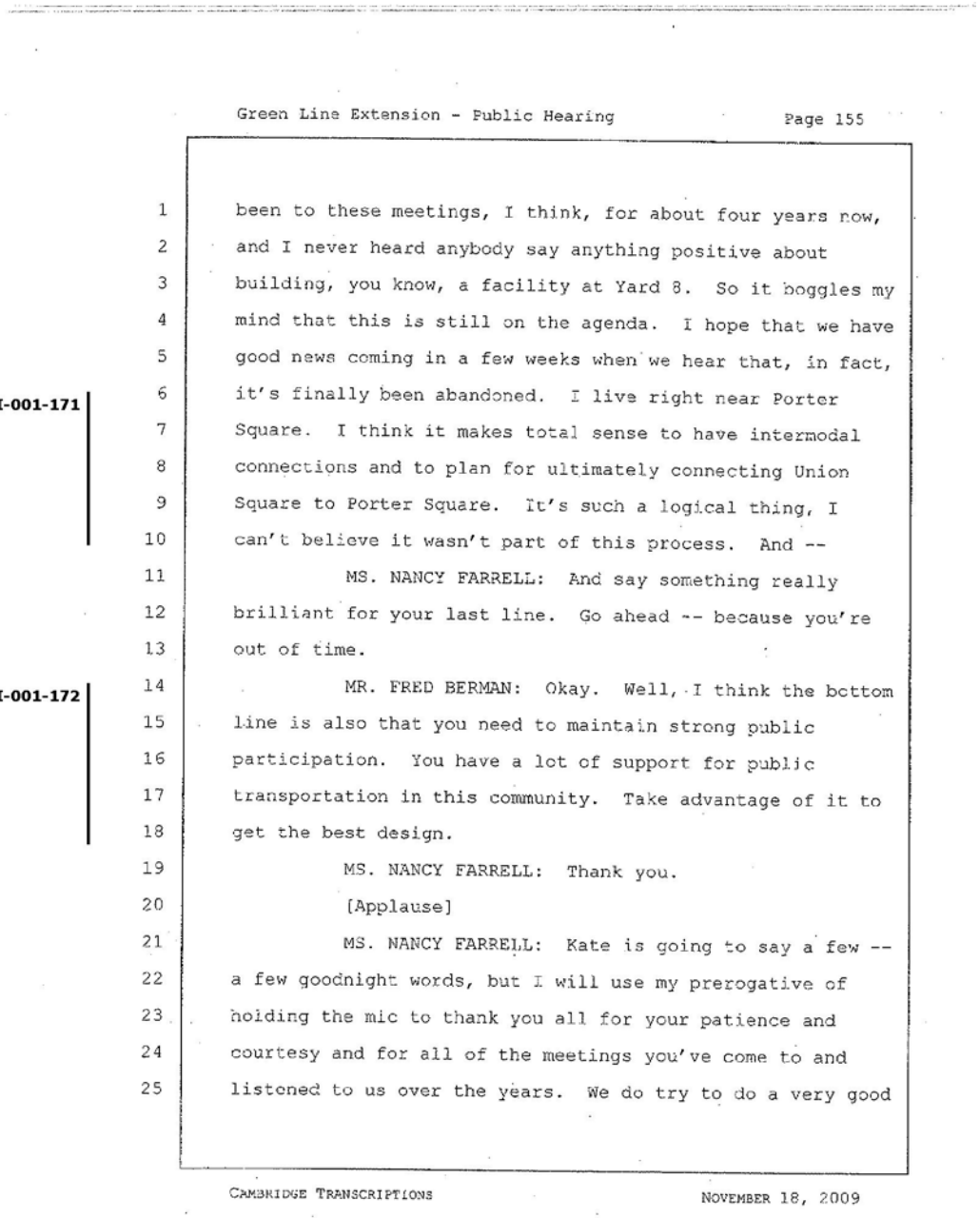
In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-001-169

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-001-170

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the



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been to these meetings, I think, for about four years now, and I never heard anybody say anything positive about building, you know, a facility at Yard 8. So it boggles my mind that this is still on the agenda. I hope that we have good news coming in a few weeks when we hear that, in fact, it's finally been abandoned. I live right near Porter Square. I think it makes total sense to have intermodal connections and to plan for ultimately connecting Union Square to Porter Square. It's such a logical thing, I can't believe it wasn't part of this process. And --

MS. NANCY FARRELL: And say something really brilliant for your last line. Go ahead -- because you're out of time.

MR. FRED BERMAN: Okay. Well, I think the bottom line is also that you need to maintain strong public participation. You have a lot of support for public transportation in this community. Take advantage of it to get the best design.

MS. NANCY FARRELL: Thank you.

[Applause]

MS. NANCY FARRELL: Kate is going to say a few -- a few goodnight words, but I will use my prerogative of holding the mic to thank you all for your patience and courtesy and for all of the meetings you've come to and listened to us over the years. We do try to do a very good

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I-001-171

I-001-172

proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-001-171

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-001-172

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

job. We're not perfect, but we thank you for all your good ideas. Kate?

MS. KATHERINE FICHTER: I wanted to say you guys are the few and the proud to still be here. Forgive me if I'm not quite as peppy as I was four hours ago, but I did have a couple of points I wanted to clarify, a few things to sum up, and just a little bit about next steps. And I was sort of jotting down that people said that really resonated with me that I just kind of wanted to come back to.

The first, actually, was Councilor Seidel, who make a really interesting point and I think a very valuable point, which is I want people to understand that, when we come to these meetings, when we read your letters, when we read your emails, and we see you in the newspaper, and we read you in the blogs, we hear you, we understand you, you influence our thinking. Just because we don't always take suggestions that people make doesn't mean that we don't hear you and doesn't mean that we don't care. It means that there may be other constraints that we're dealing with or other things that we're trying to balance or compromise. So I just wanted to get that point out there.

I also liked the point that Jim, I believe, made about trust and that we also feel that the trust is not what it should be here, and we want to keep working on

that. We try to work on it every single day with every email that we answer and every phone call we take, and we're going to keep doing that as we move into the next phases of this process.

Just a point of clarification about the DEIR, it is true that we have requested that what we have submitted so far be considered as we call a "Single EIR," which essentially means that we would be coming to the end of the process here. We've done this largely because we think we've done a good job and also because we have a schedule that we need to meet, and that helps us to get there. The point I wanted to make is that, even if we are to be granted that, and there's certainly no guarantee that we will be, that doesn't mean that the process stops. We still have responsibility to answer all of the comments we've heard here, answer all the comments that we receive through the mail, and that's not just a yes or no answer. That's a detailed answer. So I don't want anyone to walk away tonight thinking that, if we are granted the SEIR, it means that you'll never hear from us again or we'll never continue to work on what we've about because that's not the case.

A few other just sort of general issues in no particular order, so please be patient. But the issue of mitigation, somebody raised mitigation as a method for

correcting existing problems. Typically, the way we deal with mitigation is we are responsible for mitigating the impact we cause with our project. We are neither able nor really responsible to go in and solve a lot of longstanding problems that may not really have anything to do with the Green Line. Would that we could, and we know municipalities have needs. We wish that we could do those and, where there's an overlap, that's a happy coincidence. But at the bottom, our responsibility is to try to correct the problems we cause, not correct other ones.

We hear you on the buses. We're going to keep working on that. We're going to keep trying to make the bus connections as good as we can to the rail. One point I did want to keep in mind, someone early on had mentioned the importance of having bus pullouts at all of the stations. We are very sensitive to not wanting to take more private property than we need to. The bigger the footprint of the stations, that's something we need to think about. So again, there's just a balance there.

The question of women's jobs, that actually has come up recently on another project we're working on. So we're beginning to try to figure out what we are allowed to do under state and federal law to try to influence how jobs are assigned on the construction level. That's something we're going to keep working on in general, and it's

certainly something we can look at for the Green Line.

The idea of introducing mitigation before we begin construction, that was something we first heard at a meeting at Brickbottom. We think it's brilliant. We're going to try to do it where it's appropriate, where it's possible. You know, if we can put in mitigation that helps to soothe people through the construction process, that's all to the good for us, too.

Somebody said earlier that it seemed like we were designing the stations to be auto-oriented. I could not disagree with that more. These stations are the farthest possible thing from being car-oriented. Everything about this project is the farthest possible thing from being car-oriented. If we are looking to provide a safe place for people to do very quick pickup and drop-off, it does not mean that we are prejudicing cars over transit. This is a transit project. We're coming at this as a bicycle, pedestrian, neighborhood station kind of project, and I don't want anyone thinking that we're doing this to favor cars because we're not

And also on that note, while it is true that DEIR does discuss the analysis that we did more than a year ago now, I think, on the possibility of a parking garage at Route 16, we abandoned that idea a long time ago. We have said that publicly. We are not going to reconsider it.

There is not going to be a big parking garage at Route 16/Mystic Valley Parkway when that station gets built. So please, if you hear anybody saying that, please correct them.

What are some of the other things? Yes, someone asked about doing detours during the construction phase to try to keep traffic off residential streets. That's certainly something we care about, certainly something that we'll be working on.

Someone also mentioned green design. That was something that was actually in the original MEPA Certificate. It's something we've always had in mind and something we're going to be continuing to look at as we move into preliminary engineering and then beyond.

Also, on Option L, which has been talked about a lot tonight, somebody mentioned the property impacts on Option L. I think it was Tom Bent. Our preliminary analysis, which I think will hold true through the end, is Option L would require the taking of two private businesses and one parking lot. I think it was described as a significant impact. That's all relative, but that's what it is. It's two businesses and a parking lot.

Somebody said that I said something about believing that Mirror H blocked -- I don't what. Whatever it was, I didn't say it. I didn't say anything one way or

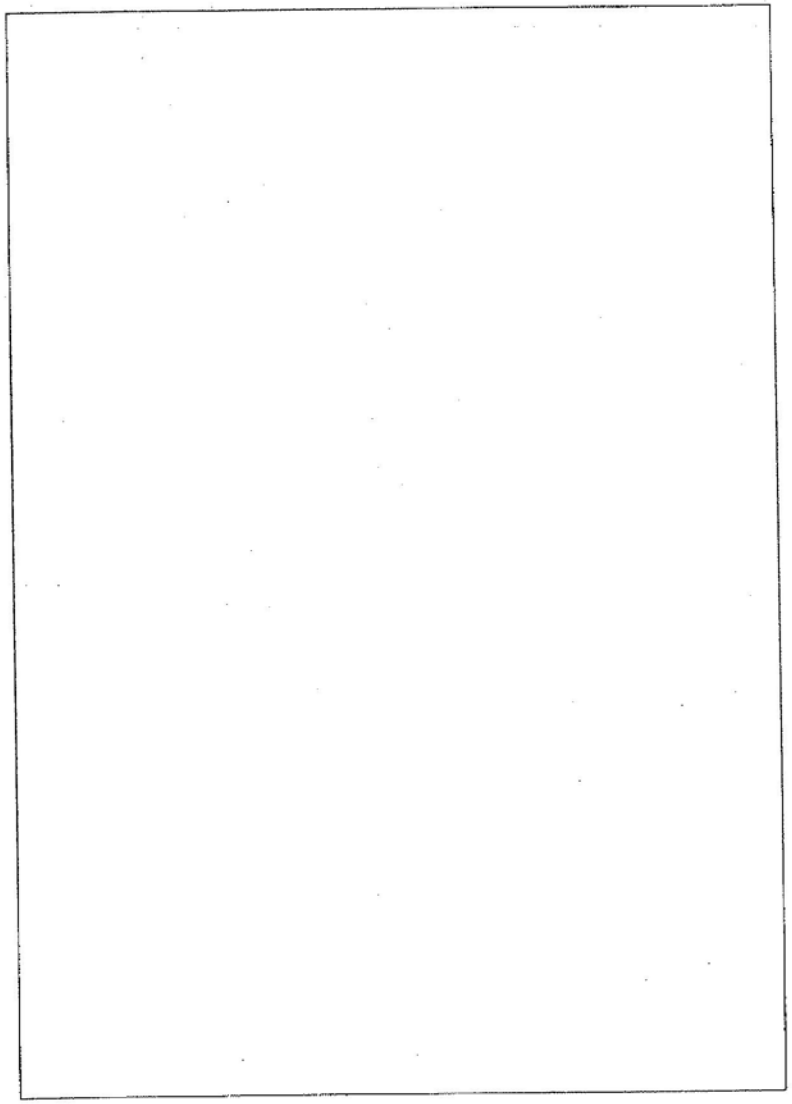
the other about whether or not one of the maintenance facility locations blocked economic development.

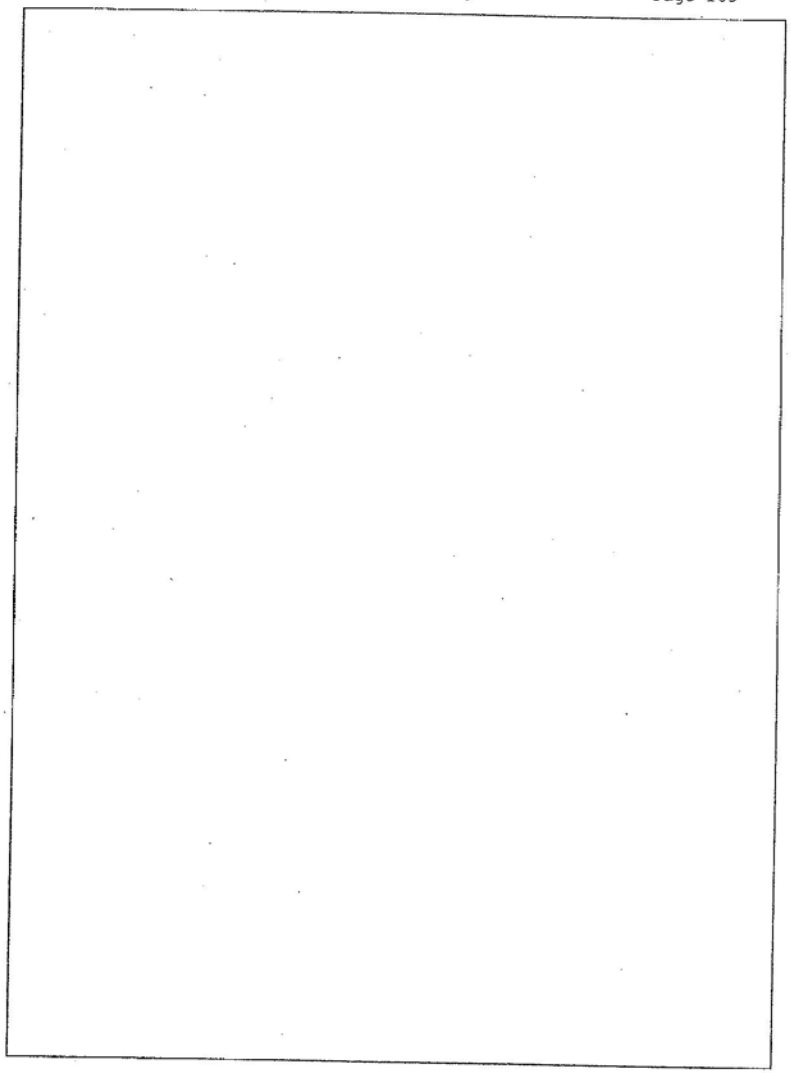
And are the guys who had the eleven principles still here? No? Okay. I wanted to say to them, and I'll say to everybody else, my name, my email address, is on the Fact Sheet. A lot of people know me, and a lot of people have it. If you have a group that wants us to come out and talk to them, if you have a group that's interested in our project who we haven't reached, we've done dozens -- more than dozens -- of meetings, but we always want to do more. So please contact me. Don't sit out there and think that we haven't reached out to you, reach out to us. We'll do whatever we can. I don't think we've ever turned down a request or an invitation, and we don't plan to do it in the future.

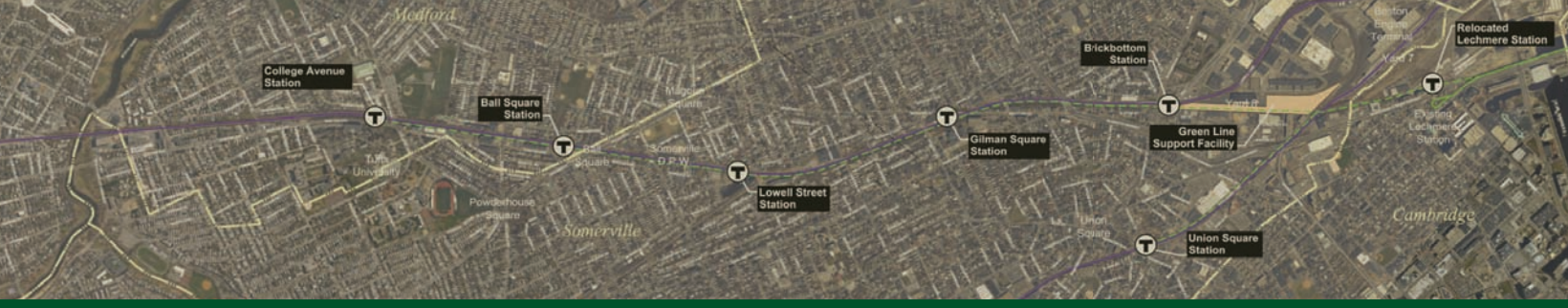
And I think that's enough for now. Thank you, everybody. We really appreciate it. We love this project. We want to keep working on it. We want to keep working with you, and please get home safe.

[Applause]

(Adjourned)



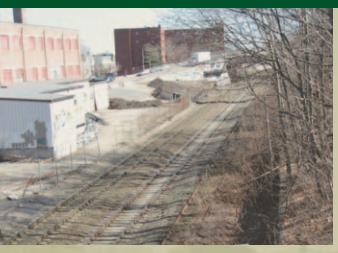




Final Environmental Impact Report

Green Line Extension Project

EEA #13886







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Responses to Comments on the DEIR

June 2010

Moving Massachusetts Forward. massDOT

GLX

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Johnson, Holly (EEA)

From: mikeadam@comcast.net
Sent: Friday, January 01, 2010 3:25 PM
To: Johnson, Holly S (ENV)
Subject: Medford green line extension: pubic comment

January 1, 2010
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:
I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.
First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014. In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR. For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

I-002-001

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

I-002-002

There are many, many problems with the Phase II approach, including:

- Risk. Without an identified funding source there is a very high probability that Route16 will never be built and the implications of this are critical.

I-002-003

- Terminus Impact. Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not

I-002-004

I-002-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-002-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-002-003

MassDOT will continue to work with MAPC and the Legislature to identify funding opportunities for the extension to Mystic Valley Parkway/Route 16.

I-002-004

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-002-004 designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

I-002-005 • Cost. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

I-002-006 • Project Management. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

I-002-007 • Environmental Justice: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

I-002-008 • Legal Mandate: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

I-002-009 2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

I-002-010 3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you,

Michael Adamian
33 Capen St.
Medford, MA 02155

I-002-005

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. It is worthwhile to note that the College Avenue Station will not need to be rebuilt should the future extension to Mystic Valley Parkway / Route 16 be constructed. Only minor modifications to the Commuter Rail tracks in the area between Brookings and Winthrop Streets would be required. Limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

I-002-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-002-007

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-002-008

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-002-009

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-002-010

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

January 7, 2010

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Secretary Ian Bowles
Executive Office of Energy &
Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Subject: Green Line Extension Public Comments

Dear Secretary Bowles:

Although I support public transportation, I am opposed to the Route 16 terminus proposed in the DEIR for the Green Line Extension Project's Full Build Alternative. Before I discuss the reasons for my objection, I would like to provide you with my comments about the project itself.

I-003-001 At this time, when State money is tight, and the cost of adding State debt is high, I feel the State has an obligation to prudently re-assess the Green Line Extension's Build-Priority; and, more importantly, to re-assess the decision to spend a Billion-Plus dollars on a project that is not an absolute necessity!

I-003-002 I similarly support David D'Allesandro's recommendations (made in his recent independent review of the MBTA) to halt all expansion projects, until the Millions-Worth of MBTA safety and maintenance projects are brought under control. It's irrelevant to the public that funds for expansion and maintenance projects come from different sources because ultimately, expenditures for either type project impact people in their pockets! When we have a pressing need to correct the maintenance and safety issues, it would be irresponsible to continue with expansion projects at this time.

I-003-003 Before this project advances into subsequent phases, and it "chews-up" more money, a realistic look should be taken by the State to see whether the need for the Green Line Extension today, is still the same as it was decades-ago when discussions about this project first began. The question that needs to be answered is: whether demographic changes that have occurred in these elapsed decades have strengthened or weakened the need for this extension to be built! When the following demographic changes are weighed, I think the conclusion is that clearly, the need for this project has significantly deminished!

- Most people today shop at suburban shopping malls instead of commuting into downtown Boston to shop.
- Major Boston hospitals have established additional facilities in communities outside of Boston, so many of their suburban patients no longer need to commute into Boston for their medical care.
- Internet and other technical advances allow many people to work from their homes instead of commuting to their Boston offices every day.

I-003-001

The Project's Purpose and Need is described in DEIR/EA Chapter 2, Purpose and Need. The Project is needed to comply with the State Implementation Plan (SIP), which includes requirements for this Project as well as other transit projects to meet the air quality and transit commitments established as a result of the Central Artery/Tunnel project.

I-003-002

Please see response to Comment I-003-001.

I-003-003

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

- Flex-time has allowed some employees to work a 4-day week, so they now commute 1-day-less than they did in past decades.
- Companies have found more attractive and convenient facilities in suburban office-parks, or industrial-developments located along major highways; so, many employees now work in the suburbs instead of in Boston. (Some manufacturing companies have similarly relocated outside of MA).
- In conjunction with the previous point, more people are moving to suburban communities away from Boston, so they can be closer to their jobs. (See the June 25, 2009 Boston Globe Chart below.) NOTE: The 2 cities along the route of the Green Line Extension have lost population from 1970 to 2007 in the June 25, 2009 chart. Somerville lost (approximately) 16%, and Medford lost (approximatly) 14%.
- Sooner or later, the MBTA will need to raise fares again. This will make public transportation less attractive, and will influence peoples' decisions on whether they will continue to commute into Boston, or seek other alternatives.

THE BOSTON GLOBE THURSDAY, JUNE 25, 2009

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Globe North
55 Ferncroft Road
Danvers, MA 01923
978-646-3901
FAX: 978-646-3940
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Editor
Kerry Donlan: dnolan@globe.com
978-646-3939
Assistant editor
Marcia Dick: m_dick@globe.com
978-646-3929
Sports editor
Craig Larson: clarson@globe.com
617-929-2850
General e-mail: globenorth@globe.com
Reporters
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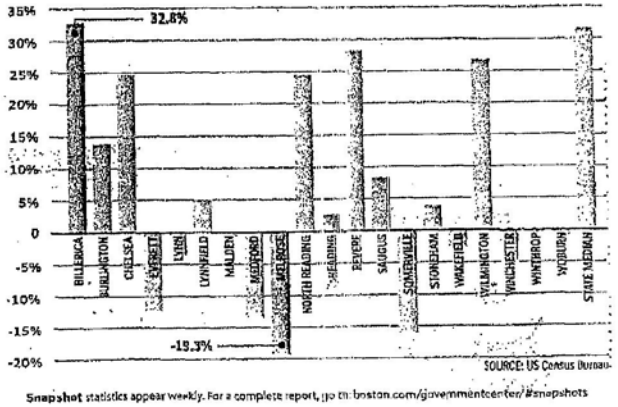
SNAPSHOT | People-watching

By Matt Carroll | GLOBE STAFF
Population change from 1970 to 2007.
Comments or ideas: mcarroll@globe.com



SOURCE: US Census Bureau

Snapshot statistics appear weekly. For a complete report, go to: boston.com/governmentcenter/#snapshots

I-003-004

Ridership projections and the methodology used in their development are described in DEIR/EA Section 3.4, Ridership Methodology.

I-003-005

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-003-006

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-003-007

As explained in Chapter 3 of the DEIR/EA, bus alternatives were evaluated for the Green Line Extension. Benefits to air quality, transit service reliability, and transit users were considerably higher with light rail alternatives compared to bus alternatives.

I-003-004 Given the demographic changes noted above, I think the Ridership Estimates in the Green Line Extension Project's DEIR is overstated significantly and should NOT be relied upon as a basis for justifying this project.

I would further add, that in 1970, when the Somerville and Medford population was high (per the 6/25/09 chart above); and, people had more reasons to commute into Boston (vis-a-vis the demographic comparisons above), the MBTA eliminated the (then existing) College Ave. - Medford, and Ball Sq. - Somerville Commuter Rail Stops because the number of riders at these locations was low, and the MBTA wanted to improve the time to and from Boston!!! It appears there were no lessons learned from this past history since the Green Line Extension Plans continue going forward, even though today's population and demographic conditions are opposite to those of 1970! This is not logical, and there is "something wrong with this picture"???

I-003-005 Although the Green Line Extension, as currently planned, was agreed to (years ago) by the State to mitigate (what environmentalists had "anticipated" would be) an increase in pollution resulting from "Big Dig" highway improvements, the question that needs to be asked today is: whether the basis of this lawsuit is still valid? For example: are the Post-Big-Dig pollution, and air quality levels better/worse/same as the Pre-Big-Dig levels? Going forward, I would guess that levels would improve (even with possibly more vehicles in the road) because newer vehicles have better emission standards, and more people own hybrid vehicles now. So, would a challenge to the lawsuit be appropriate, and/or possible?

Expansion projects (like the Green Line Extension) should rise or fall on their own merits, and should not be forced upon us by "political horse-trading", or by a lawsuit filed by a group of "activists" who were not elected to represent me, or a majority of my fellow taxpayers. The question those in authority need to ask themselves is: whether the State would have chosen to move ahead with the Green Line Extension at this time, if the legal commitment, and the potential loss of Federal highway funds, didn't exist? I suspect the answer to this

I-003-006 question is no; so, I feel the State needs to find a way to either re-negotiate, or to get-out of the legal commitment entirely. If this isn't possible, the State should investigate whether the (clean-air, and improvements to public transportation) objectives of the legal commitment can be satisfied with alternatives or substitutions, instead of building the Green Line Extension as described in the DEIR. Some suggestions that come to mind are as follows:

I-003-007
- Hybrid Buses, and Better Bus Service, in and around the Green Line Extension's route. Hybrid Buses would be an investment towards the long-term improvement in air quality, could be implemented quickly, and they would be an easier and cheaper option than building the Green Line Extension.
  NOTE: At public meetings in my community, local commuters cited "Service Problems" (e.g. "bus was late", "buses are not reliable", etc.) as the reason they wanted the Green Line Extension. No one said they currently lacked access to public transportation; so,

I-003-008

Commuter rail shuttle alternatives for the Green Line Extension was evaluated as part of the 2005 Major Investment Study (DEIR/EA Section 5.2.4). These alternatives could conceivably use Federal Railroad Administration-compliant Diesel Multiple Unit (DMU) vehicles. No such vehicle is currently in production. The environmental and transit user benefits of these alternatives were considered inferior to benefits from a Green Line light rail transit extension.

I-003-009

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7. MassDOT sees no evidence that a tunnel alternative would be substantially less expensive than the order-of-magnitude costs presented in the DEIR/EA analysis.

I-003-010

Please see response to Comment I-003-009.

I-003-007 to me, spending billions on the Green Line Extension isn't really needed when all people seem to be asking for is better bus service.

I-003-008 • Diesel Multiple Unit (DMU) Trains, "IF" they can run on the existing Lowell Line Commuter Rail Tracks. Some of the DMU operating features are similar to Green Line Trolley's (e.g., DMU's don't need a locomotive, so they are a cleaner running train, they can pull in & out of stations quickly, and they can also run in smaller lengths and at more frequent intervals). All existing Lowell Line Commuter rail trains would be replaced with DMU's, and although they are expensive, they would be a good long-term investment towards improving air quality for the entire Lowell/Boston route and should be an acceptable alternative.

Rather than building a Green Line (light-rail) station at College Ave. - Medford, and at Ball Sq. - Somerville, a DMU station would be built on the commuter rail track instead. Under this modification plan, the Green Line terminus would be located in Somerville (at Ball Sq., Lowell St., or "somewhere" in between). This change to DMU's and to terminus location would resolve many of the more costly issues, concerns, and controversies associated with a Medford Green Line terminus (i.e., abbuters, bridges, drainage, commercial & residential land takings, traffic, parking, pollution, etc.) If it is decided to build a Route 16 - Medford station, it would be built as a DMU station also.
NOTE: Given the past public transit experience at the College Ave. and Ball Sq. locations (as described earlier in my comments regarding demographics), I would recommend the least expensive, least complicted, and the least disruptive option for these two stations be selected, and I think DMU's fits this profile.

I-003-009 • Tunnel to the more challenging, or abutter sensitive portions of the Green Line Extension's route. According to the "Deep Bore Tunnel Union Representatives", who attended several public meetings, tunneling would be a better and cheaper alternative to building the Green Line Extension on the commuter line railbed. Tunneling also provides more flexibility on the route, station locations, expansion options; and, it eliminates costs and resolves issues related to abutters, bridges, land takings, etc. Even though the DOT discounts it as too expensive, I think tunneling deserves another look, and the State should persue this with the Tunnel Borers Union directly, rather than using cost estimates from engineering consultants alone.

I-003-010 NOTE: For decades, Medford has been unsuccessful in their effort to revitalize Medford Square (the center of our town). Therefore, if tunneling can be utilized for the Green Line Extension, perhaps a Green Line Subway station can be located at, or near Medford Sq. which may stimulate the economic growth for us, much like the Red Line Subway Station did for Somerville in Davis Square.

I am against building the Green Line terminus at the Route 16 location as described in the Full Build Alternative for the following reasons:

I-003-011

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-003-012

No parking is proposed or foreseen for future plans at Route 16/Mystic Valley Parkway Station. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-003-013

It is unfortunate that, at the time of the recent bridge reconstructions, accommodations were not made for the future Green Line Extension. However, reconstruction of these bridges is still necessary in order to construct the extension of the Green Line.

I-003-011

- Medford already has sufficient access to many public transit options, and commuters in this area have a number of choices available to them (e.g., express bus, several local buses, a commuter rail station, an orange line station, and a red line station all in close proximity). If the MBTA maintains a good level of service on these transit modes, I don't think extending the Green Line to the Route 16 location is necessary.

I-003-012

- Route 16 is currently a very heavily traveled roadway, and is often in "gridlock" conditions especially during rushhours and on week-ends in summer. In 2009, 30,000 cars a day were clocked according to DOT. In addition to local traffic, Route 16 serves as a pathway for people who pass through Medford from/to Routes 93, 16, 38, 60, 2, & 3, on their way to other destination. A Green Line terminus at Route 16 would bring more traffic onto this roadway as people drop-off commuters, or park and ride themselves. At the same Route 16 location, the "Whole Foods" grocery store also generates customer traffic that adds to the roadway congestion. The DEIR states they do not plan to erect a parking garage at the Route 16 station; but, I fear that at some future date one will be built. The DEIR also states that there are no plans to change bus routes at this time but I can envision that new bus routes will subsequently be created to bring commuters from other suburbs to the Route 16 terminus. More buses will add to the traffic problems as well. We who live in close proximity to the Route 16 roadway will be severely burdened by all of these congession and traffic issues to a road that was originally designed for "pleasure vehicles only". In the future Route 16 will be no pleasure if a Green Line Terminus is located here.

- DOT has identified the following roadway bridges that will need to be re-constructed for the Green Line Extension because they are not high enough, or wide enough, for both the commuter line trains, and Green Line trolleys to pass beneath them. The North St. & Winthrop St. bridges would need to be "re-constructed" in the Full Build Alternative only. The date noted beside each bridge below, is the date each bridge was last re-built (which I obtained from the date-stamped on each bridge's side-wall).

2003	Walnut St. (Somerville)
1983	Medford St. (Somerville)
2001	School St. (Somerville)
2006	Lowell St. (Somerville)
1999	Cedar St. (Somerville)
1973	Broadway (Somerville)
1996	College Ave. (Medford)
1983	Winthrop St. (Medford)
1996	North St. (Medford)

I-003-013

Note that 5 out of these 9 bridges are new (in bridge-life terms) and were already completely rebuilt since 1996! Now, the DEIR says they need to be "re-constructed" again! This is an outrageous dilemma, and taxpayers will now need to pay for these

I-003-014

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-003-015

Please see response to Comment I-003-014.

I-003-016

The Proposed Project will terminate at College Avenue Station and does not require that the North Street Bridge be relocated.

I-003-017

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-003-018

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has

I-003-013 a second time!!! With nearly 600 MA bridges in serious disrepair, it's unconscionable to delay fixing deteriorating bridges in other MA communities in order to "waste" precious funds "re-constructing" 6 recently rebuilt bridges for the Green Line Extension.

I-003-014 I am against the Route 16 terminus because it will require the North St. bridge "re-construction". I live at 2 North St., Medford, and I know first-hand that the existing North St. bridge is already too steep for both pedestrians and vehicles. If this bridge is re-constructed so it's higher, it will detrementally impact the pedestrians and vehicles that use this bridge. For example: In winter weather, if the existing North St. bridge is not sanded, it is a challenge to drive your car up to the crest (when coming from the direction of my home) without slipping and sliding. I don't have any health issues, yet I get winded when I walk up this bridge from my home. I recently saw an elderly lady, who had a cane, resting against the side of this bridge, about half-way up the incline, because she was having difficulty walking up the steep grade towards Boston Ave!

I-003-015 NOTE: Walkling Court, which is a development (HUD) for seniors & disabled people, abuts the North Street bridge. I therefore think it's fair to assume that the lady I observed with the cane lives at Walkling Court. I also think that there are other Walkling Ct. residents that similarly have difficultly with the steep grade on the North St. bridge, or are unable to walk-up the bridge at all. Although the planned Green Line Terminus is in close proximity to Walkling Ct. the residents would be unable to get to the station easily, as the steepness of the bridge would be an unsurmountable obstacle.

I-003-016 North St. is a well traveled street every day of the week. If it were closed for the period of re-construction, the local traffic would be forced to use Route 16, because all adjacent streets around the North St. bridge are "one-way'. The "one-way" status was implemented years ago to deter drivers stuck in Route 16 traffic from using the surrounding streets parallel to Route 16 as detours. The closing of North St, when the North St. bridge was rebuilt in 1994-1996 was very inconvient for both my neighbor- and for those that otherwise used North St. for local activites.

I-003-017 • I'm opposed to a Route16 Green Line terminus because building it will require commercial and residential land-and/or-property takings along the Medford portion of the Green Line Extension. Land takings, no matter how big, or small, will negatively impact property values, and will negatively impact the visual appearance of this neighborhood. For me, no amount of mitigation can rectify

I-003-018 or compensate for this damage! Although sound barriers have been mentioned as a help with noise issues, they are not, in my view, a visually appealing enhancement to an abutters' property.

I-003-019 The City of Medford does not want to loose any commercial property tax-revenue, so I oppose the taking of any Boston Ave. commercial property to accomodate a Route 16 Green Line terminus. Cummings Foundation, owners of 196-200 Boston Ave., have stated that the

complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. This process will be used going forward when the Mystic Valley Parkway/Route 16 segment is evaluated and designed.

I-003-019

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-003-020

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-003-021

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified

I-003-019 taking of their building would "remove 700 jobs from our community", and in all probability, their current occupants would relocate outside of Medford. Area small businesses such as coffee shops, sandwich shops, variety stores, etc. are currently serving the occupants of the Boston Ave. commercial properties, so if the commercial properties were taken for the Green Line terminus the area small businesses would financially suffer the loss of their customers who would no longer be coming to this neighborhood.

I-003-020 • Many abutters along the Medford portion of the Green Line Extension (including the elderly & disabled living at Walkling Court, whose buildings are only a "fire-lane's-- width" away from the railbed) will be exposed to more noise, vibration, and diesel particulates, if the commuter rail tracks are moved closer to their homes to accomodate a Green Line terminus at Route 16. Exposure to particulate pollution causes respiratory and cardiovascular illnesses, and noise pollution, aside from being a constantly disruptive annoyance, causes blood pressure to remain

I-003-021 elevated. Although DOT has mentioned at public meetings that they may be able to mitigate some of the train/trolley noise & vibration with a combination of sound barriers, oiling tracks, and rubber mats under the rails, this may help abutters, but, it is unclear how an effective filter these items will be for those in otherwise close proximity. For example: I live 10 houses away from the train tracks, and I constantly hear the trains roaring by 24/7. Even my 94 year-old mother who is deaf in one ear and has very little hearing in the other says she can hear the train noise, especially at night when she is in bed. I also hear the annoying wistle blasts, that are sounded for safety, each time the northbound commuter rail trains reach North St./ Route 16, to warn the Canal St. & West Medford Sq. street-level crossings that a train is approaching.

I-003-022 Similarly, with what I anticipate will occur, with an increase in Route 16 vehicle traffic, and more frequent buses dropping-off commuters at a Route 16 terminus, my neighborhood will be exposed to higher amounts of "ultrfine" particle pollution from their exhaust fumes. Researchers beleive these ultrafine particles are harmful as they carry toxic chemicals throughout the circulatory system and into the brain.

In closing I would like to say that I realize the pluses & minuses of having a Green Line transportation option close by, as I lived only 5 blocks from the current Lechmere terminus before I moved to Medford in 1958. Five blocks away wasn't at all inconvient, even though I was a child and we always walked to the Lechmere station. Since moving to Medford, I've always lived at 2 North St., so I consider myself to be an "expert" on this neighborhood. I've seen an overgrown barren field and an adjacent coal-dealer, and coal storage bins, be replaced by the Walkling Court development: I've seen Container Corp., a factory that manufactured paper boxes at 196-200 Boston Ave., get transformed into the Cummings Foundation office building we have today: I've seen the Red Line extended from the Harvard Sq terminus to Alewife. But beyond

and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-003-022

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts for the segment to College Avenue Station, but applicable to the future Mystic Valley Parkway/Route 16 segment, are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

these, I've seen, lived, and experienced the fact that the demand for public transportation today is no where near what it once was in the 1960's, 1970's or even in the 1980's in this area, and this trend, in my opinion, is not likely to reverse itself.

Therefore, for all of the reasons stated above, I am recommending that the Green Line Extension's terminus NOT BE LOCATED AT THE ROUTE 16 LOCATION.

Thank you for your time, and for your consideration of my remarks.

Sincerely,

Mary Anne Adduci

Mary Anne Adduci
2 North Street
Medford MA 02155-4319

Phone: 781-396-5138

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JAN 8 2010

MEPA

January 7, 2010

1 Fitchburg Street, Unit C305
Somerville, MA 02143

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Reference Project Number EEA #13886

Dear Secretary Bowles,

I am very excited about the Green Line Extension and thinks it's a great improvement for additional access to the T for this area of Somerville.

I-004-001

As an artist/designer at Brickbottom Artist Buildings for the past 3 years, I oppose the placement of the Maintenance Facility in Yard 8. It will dramatically affect the lives of my neighbors and friends on the northeast side of the building with constant noise from trains idling, revving up and down as they are moved around, ringing their warning bells and excessive vibration as they roll by. If their windows are open attempting to allow fresh air in will also allow dust, soot and louder noise in from the train activity Spring/Summer/Fall. I know because I spend long hours working on the south side of the building that overlooks the 4 tracks that service the commuter rail and current maintenance facility and live with it every day. It is not pleasant at all and for them it will 24 hours a day.

There is many other long term environmental impacts with toxic run off, keeping this area of Somerville strictly an industrial zone and cut off from adjacent parts of Somerville.

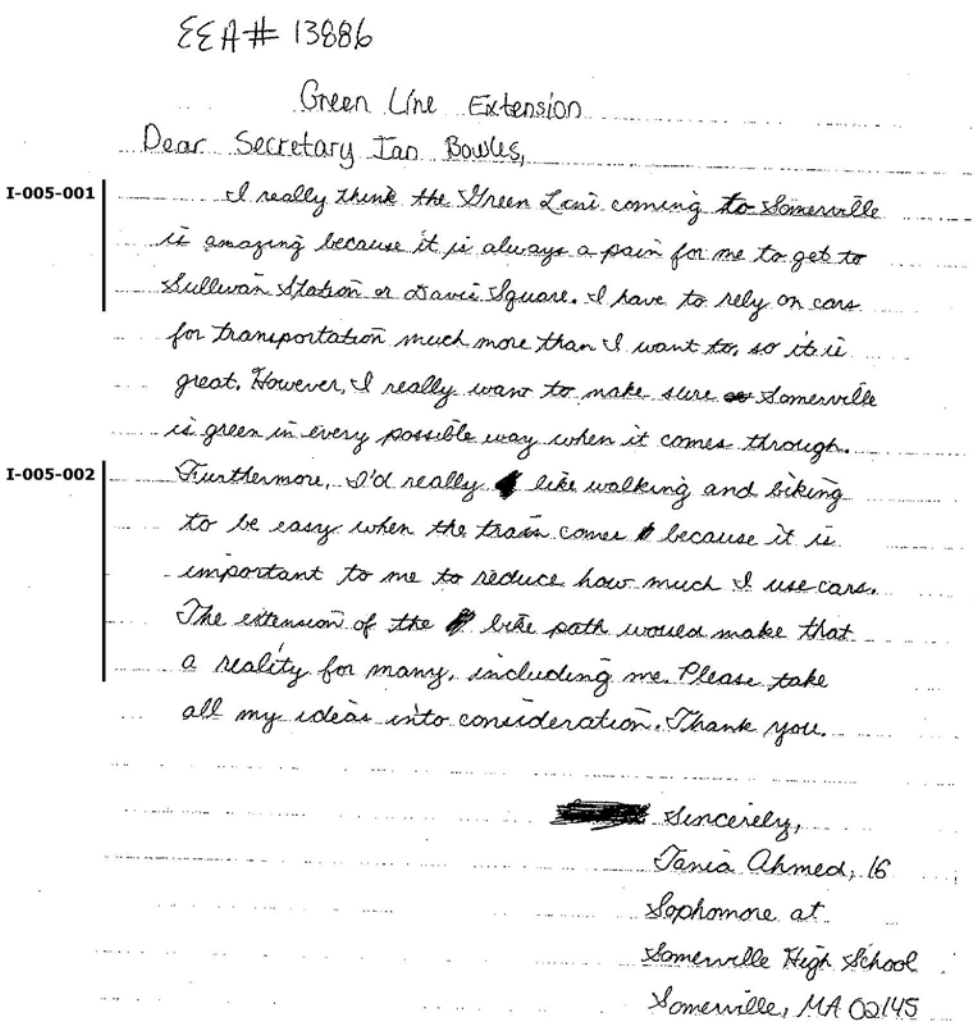
I oppose Yard 8 and support Somerville's Mirror Scheme H proposal. Thank you for your time and consideration.

Best regards,

David Adriaansen

I-004-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



EEA# 13886

Green Line Extension

Dear Secretary Ian Bowles,

I-005-001 I really think the Green Line coming to Somerville is amazing because it is always a pain for me to get to Sullivan Station or Davis Square. I have to rely on cars for transportation much more than I want to, so it is a great. However, I really want to make sure Somerville is green in every possible way when it comes through.

I-005-002 Furthermore, I'd really like walking and biking to be easy when the train comes because it is important to me to reduce how much I use cars. The extension of the bike path would make that a reality for many, including me. Please take all my ideas into consideration. Thank you.

Sincerely,

Tania Ahmed, 16

Sophomore at

Somerville High School

Somerville, MA 02145

I-005-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-005-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: Matthew Alford [mattalfonzo@yahoo.com]
Sent: Friday, January 01, 2010 2:20 PM
To: Johnson, Holly S (ENV)
Subject: green line extension

I-006-001

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

There are many, many problems with the Phase II approach, including:

- Risk. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- Terminus Impact. Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- Cost. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- Project Management. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

I-006-001

Please see Comment Letter I-002.

• Environmental Justice: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
• Legal Mandate: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

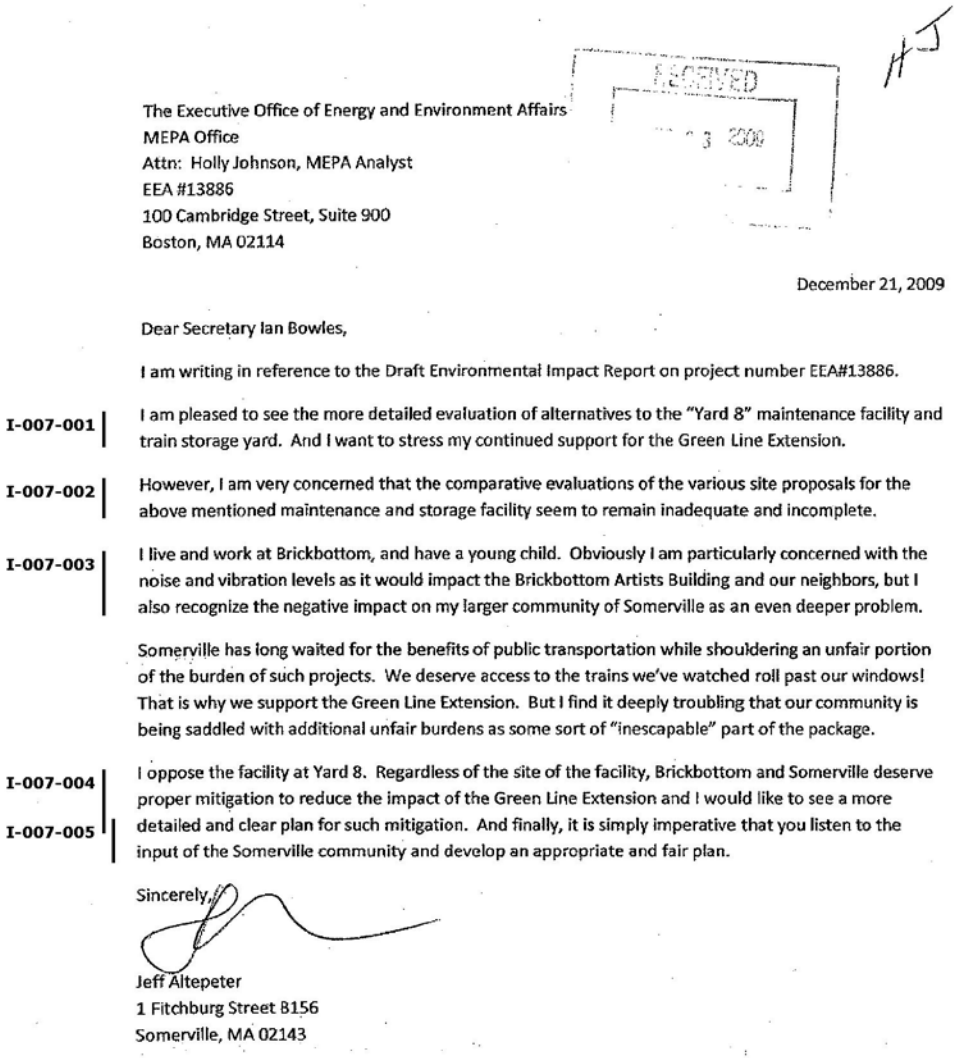
3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Matthew Alford
46 Pinkham Rd
Medford

781 219 4427



The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED

#J

December 21, 2009

Dear Secretary Ian Bowles,

I am writing in reference to the Draft Environmental Impact Report on project number EEA#13886.

I-007-001 I am pleased to see the more detailed evaluation of alternatives to the "Yard 8" maintenance facility and train storage yard. And I want to stress my continued support for the Green Line Extension.

I-007-002 However, I am very concerned that the comparative evaluations of the various site proposals for the above mentioned maintenance and storage facility seem to remain inadequate and incomplete.

I-007-003 I live and work at Brickbottom, and have a young child. Obviously I am particularly concerned with the noise and vibration levels as it would impact the Brickbottom Artists Building and our neighbors, but I also recognize the negative impact on my larger community of Somerville as an even deeper problem.

Somerville has long waited for the benefits of public transportation while shouldering an unfair portion of the burden of such projects. We deserve access to the trains we've watched roll past our windows! That is why we support the Green Line Extension. But I find it deeply troubling that our community is being saddled with additional unfair burdens as some sort of "inescapable" part of the package.

I-007-004 I oppose the facility at Yard 8. Regardless of the site of the facility, Brickbottom and Somerville deserve proper mitigation to reduce the impact of the Green Line Extension and I would like to see a more

I-007-005 detailed and clear plan for such mitigation. And finally, it is simply imperative that you listen to the input of the Somerville community and develop an appropriate and fair plan.

Sincerely,

Jeff Altepeter
1 Fitchburg Street B156
Somerville, MA 02143

I-007-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-007-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-007-003

DEIR/EA Sections 5.7, Noise, and 5.8, Vibration, describe the noise and vibration impacts, respectively, expected from the Project. Pursuant to FTA-established guidelines, these impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments, describes the mitigation measures that would be implemented to eliminate, minimize, or offset impacts above regulatory thresholds.

I-007-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it

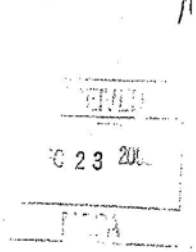
should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-007-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

The Executive Office of Energy and
Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114



December 21, 2009

Dear Secretary Ian Bowles,

I am a resident of the Brickbottom Artist Building at 1 Fitchburg St. in Somerville, MA and have owned my condominium for over ten years. I am very excited about the green line coming to our neighborhood but oppose the proposed site for the maintenance facility. Our condo would be directly affected by the noise from Yard 8, as we are located in the rear of the building, closest to the site.

I-008-001

I am opposed to citing the Green Line Storage Yard and Maintenance Facility in Yard 8. In addition to noise and vibration concerns, the Yard 8 location would build a barrier between the Inner belt and the Storage Yard and Maintenance Facility would have a direct impact on future tax revenue as it impacts adjacent property value and future growth potential.

I support the Green Line extension but feel like the Train Storage Yard and Maintenance Facility add an unfair burden to our community.

Thank you for considering alternatives to Yard 8.

Sincerely,

Rebecca Altepeter
1 Fitchburg St. #B156
Somerville, MA 02143

I-008-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: dma4echo@aol.com
Sent: Sunday, January 03, 2010 1:55 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension

Dear Holly,

I assume that the fundamentals surrounding global warming and the need for greater energy efficiency are sound. I believe that the Obama Administration's contribution to jumpstarting high speed rail in the lower forty-eight states could be absorbed by the MBTA's current deficit exactly at a time of shrinking fiscal opportunities for the growth of domestic rail. The MBTA currently provides effective commuter rail to Gloucester/Rockport and Needham by a single line. I read in a Green Line extension e-mail that extending the Green Line one more stop to Route 16 would make light rail accessible to an additional 10,000 people. A single line for the last stop would not affect the flow of traffic on the rest of system in the very unlikely event of engine failure and would significantly lessen construction cost by not requiring taking any private land and possibly avoid construction of several large retaining walls. The cost of widening two two lane bridges would also be lesscned. Please make this work for most number of people and you will be laying the groundwork for solid growth in the future. I-009-001

Respectfully,

David Anderson

108 Capen St.

Medford

1

I-009-001

Due to constraints in system capacity and operational flexibility, the MBTA has included no single track segments in its rail transit network. The Green Line Extension Project will be constructed entirely with a double-track configuration.

Johnson, Holly (EEA)

From: KYANN ANDERSON [kyann.anderson@gmail.com]
Sent: Friday, January 08, 2010 11:55 AM
To: Johnson, Holly S (ENV)
Cc: jillawrence@groundworksomerville.org; jlawrence@groundworksomerville.org; KYANN ANDERSON; Moore, Alan@Boston; joe'bikesalot@yahoo.com
Subject: Green Line Extension Draft EIR (EEA #13886)

January 8, 2010

To: Secretary Ian Bowles

Executive Office of Energy and Environmental Affairs

MEPA Office

EEA #13886

Attn: Holly Johnson

MEPA Analyst

100 Cambridge Street, Suite 900

Boston, MA 02114

Fax: 617-626-1181

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Ian Bowles:

First and foremost, I would like to applaud the efforts that both you and the State have taken thus far to assure the thoughtful design of the Green Line Corridor. I have been an active member of the Somerville community for over 7 years, and it is refreshing to see so much attention being placed on channeling information to those directly impacted by this development. A sincere thank you for recognizing the importance of this effort - please know, all of your hard work does not go unrecognized.

I-010-001

The main purpose of my letter is to voice my strong support of the Core Community Principles that have been painstakingly generated by Groundwork Somerville, Somerville Transportation Equity Partnership, Somerville Community Corporation, & Community Health Agenda. The principles addressed in this document accurately recognize how the community envisions this project should be and how we propose to maximize the positive impacts it will have on our community. Somerville has waited a long time for this, and the importance of

1

I-010-001

MassDOT has reviewed and considered the “Core Community Principles” for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

I-010-001 getting things done right in every aspect is critical. To be frank, this project will impact families & businesses for generations to come – screwing it up is not an option.

I would like to expand on a couple of specific items within these Principles, to assure proper attention be placed by you, when making decisions in the future. Specifically, are my concerns of station design, community path development & maintenance facility location.

I-010-002 Firstly, the overall designs of each subway station & its seamless connection to the community path, bus routing & existing traffic flow are very critical items to consider. Given the density of our surrounding neighborhoods, the community members adjacent the Lowell Street subway station want to assure that proper care is given to minimize automobile congestion and assure ample transfer points both to the path & all existing bus routes.

I-010-003 There is an extreme ground elevation change at Lowell Street, and while presenting itself as a design challenge, the success of an accessible community path connection point should be well-designed and as compact as possible, given the limited land space available. While this connection point may need to trespass onto the private land known to many as the 'Maxpac' site, it must have 24-hour public access, to assure all residents can

I-010-004 conveniently access the path as needed - not just when permissible by the current land developer. Additionally, the aesthetics of the subway stations should be vetted with the surround community, as well as contain environmentally intelligent design to reflect our societal responsibility to minimize global impact. While the stations should attempt to blend into surrounding context, a strong artistic expression at each station entry point would be congruent to the diverse & creative social fabric of Somerville.

I-010-005 Secondly, without question, the development of the community path should be in conjunction with the Green Line Corridor. Funding for this project needs to be in tandem with the green line expansion, to assure maximum ridership, reduction in automobile traffic/pollution, and minimal financial burden for the State. As evidenced by the overwhelming success of the existing community path, our community would be missing out on a huge environmental opportunity if the community path were not developed beyond its current location into Boston. The tie between the community path and a subway destination point is beyond essential, providing alternative means of transportation as well as a desperately needed community green space. It will not only promote physical activity, it will strengthen our sense of community by providing a much needed space to gather absent of the dreaded automobile. Those of us living within the oppressive densities of Somerville can truly speak with conviction as to why this community path mustn't simply be considered an 'amenity' item, but rather, a non-negotiable element of the Green Line Corridor, critical in maintaining our standard of living. To be fair, I recognize the financial burdens of our economic climate are continually rising. However, based on my professional experience, the financial impact of developing the community path separately to the Green Line Corridor would not capitalize on the State's valiant effort to stretch our limited funding as widely as possible. If the community path were to be developed parallel to the Green Line Corridor, many of the staging & construction cost items would overlap one another – this savings would not be seen otherwise. In addition, consistent with the Maxpac Development, the cleared community path adjacent the rail lines could be utilized as an access point for the construction vehicles used to build the subway stations, which would further minimize the disruption to surrounding neighborhoods. Any attempt to develop the community path after the Green Line Corridor is simply not the best use of our taxpaying dollars, period. We need to maximize what dollars we have in a forward-thinking way.

I-010-006 Finally, I would like to express my strong disapproval for the proposed Yard 8 Maintenance Facility location. Not only for its overwhelming negative impacts on the Brickbottom residents, but for its complete destruction of any successful master-planning solution the surrounding area may achieve. For the amount of effort our city has put into planning the future of Somerville & the creation of developmental solutions to generate desperately needed tax revenue, placing the facility at Yard 8 completely destroys these potentials for success. The location of this facility as currently proposed, along with the physical & visual divide created by the current McGrath O'brien Highway, would provide absolutely no incentive for future developers to invest in the surrounding parcels, due to their adjacency to the facility and their physical isolation to the rest of Somerville. What once

2

I-010-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-010-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-010-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green

I-010-006

was considered an under-utilized waterfront area with endless possibility; these parcels would become developmentally stagnant if Yard 8 goes through – a prospect that our city can literally not afford – both economically and morally. I would encourage you and the State to support the proposed Option L design in all future decisions. While falling far from ideal, I believe it would serve as the more tolerable solution with the Somerville community.

I understand the complexity of the Green Line Corridor design exposes the State to many tough decisions in the months and years ahead. However, without question, this development stands as one of the most important developments Somerville will see in my lifetime. Please do your part in representing the Somerville community by assuring these points of concern are properly addressed & considered in all future decisions.

My sincere appreciation for your time, dedication & commitment to serving the Commonwealth of Massachusetts.

KyAnn Anderson RA, LeedAP

Somerville Resident

3

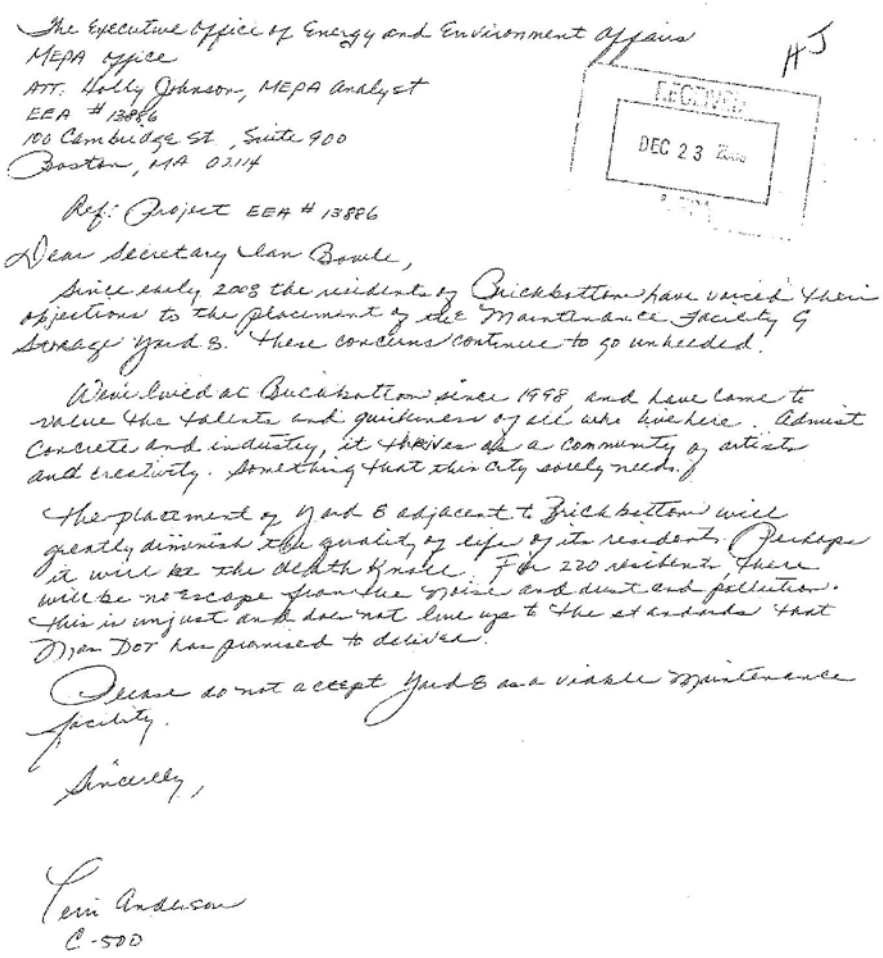
Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-010-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-010-006

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



The Executive Office of Energy and Environment Affairs
MEPA Office
ATT: Holly Johnson, MEPA Analyst
EEA # 13886
100 Cambridge St., Suite 900
Boston, MA 02114

RECEIVED
DEC 23 2008

Ref: Project EEA # 13886

Dear Secretary Ian Bowles,

Since early 2008 the residents of Brickbottom have voiced their objections to the placement of the Maintenance Facility & Storage Yard 8. These concerns continue to go unheeded.

We've lived at Brickbottom since 1998 and have come to value the talents and quirkiness of all who live here. A mixture of concrete and industry, it thrives as a community of artists and creativity. Something that this city sorely needs.

I-011-001

The placement of Yard 8 adjacent to Brickbottom will greatly diminish the quality of life of its residents. Perhaps it will be the death knell. For 220 residents, there will be no escape from the noise and dust and pollution. This is unjust and does not live up to the standards that Mass DOT has promised to deliver.

Please do not accept Yard 8 as a viable Maintenance facility.

Sincerely,

Teri Anderson
C-500

I-011-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Nicholas Watson [nwatson@fas.harvard.edu]
Sent: Thursday, January 07, 2010 9:53 PM
To: Johnson, Holly S (ENV)
Subject: Re: EEA #13886
Attachments: DEIR Letter.doc

HARVARD UNIVERSITY

DEPARTMENT OF ENGLISH

BARKER CENTER, 12 QUINCY STREET, CAMBRIDGE, MASSACHUSETTS 02138

From: Amy Appleford and Nicholas Watson,

1 Fitchburg Street, C316

Somerville, MA 02143

Tel: 617 625 0167

Email: applefor@bu.edu; nwatson@fas.harvard.edu

To: Secretary Ian Bowles,

Executive Office of Energy and Environmental Affairs,

MEPA Office

Attn: Holy Johnson, MEPA Analyst

EEA #13886

100 Cambridge Street, Suite 900

Boston, MA 02114

Fax: 617 626 1181

Email: Holly.S.Johnson@state.ma.us

Thursday, January 07, 2010

Dear Secretary Ian Bowles,

We are writing in regards to the Draft Environmental Impact Report on project Number EEA#13886. We are residents of the Brickbottom Community at 1 Fitchburg Street and Professors of English at, respectively, Boston University and Harvard University. We have lived at Brickbottom since 2002. We value Brickbottom in part for its vibrancy as a mixed community of artists, activists, academics, and businessmen and for its proximity to Union Square, an area whose development we have been watching closely. Even though it will affect us at Brickbottom, we strongly support the Green Line extension, for the positive impact it will have on Somerville and Medford, for environmental reasons, and because it will bring Somerville, Medford, and us closer to Boston.

I-012-001

Our main concern with the Green Line extension project is the siting of the Maintenance Facility at 'Yard 8.' We strongly oppose this location for the facility. We are happy to see that some attention is now being given to alternative sites for the maintenance facility, namely Mirror H and Option L, both of which have recently begun to be investigated publicly by MassDOT. This shows to us that MassDOT is open to listening to the concerns of the community, and we are much encouraged to see the process working as it should, given the overwhelming concerns that have been expressed, not just by Brickbottom residents, but by East Somerville and Cambridge residents, about MassDOT's original promotion of Yard 8. However, we want to emphasize again that Yard 8 will have massively detrimental affects not only on Brickbottom but on the development of Union Square, the Inner Belt region, and the city of Somerville as a whole.

I-012-002

The Draft Environmental Impact Report process reckons community impact by building, not individual. However, Brickbottom is a single building that houses some 220 residents, all of whom will be immediately affected by Yard 8 from the moment the first bulldozer arrives to begin work. Indeed, there are signs that property values in the building have already been adversely affected, with potentially significant loss of equity to home owners and of taxation revenue to Somerville.

Financial loss, however, pales into insignificance in comparison to the damage done to our individual and collective lives by environmental degradation, especially through further deterioration of our air quality, and exacerbation of light and noise pollution. We already live in an area heavily polluted in all these respects, not least by the proximity of major roads (Highway 28) and railway lines. Yard 8 will massively increase all these problems and threaten to make life intolerable to many of us.

2

I-012-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-012-002

Please see response to Comment I-012-001.

I-012-003

Despite encouraging signs, we remain deeply concerned that MassDOT did not recognize these problems from the start, but instead has sought to minimize claims that Yard 8 will have any significant impact on residents. Instead, the DEIR makes the absurd claim that because "the proposed maintenance facility site is located in an existing industrial area next to the MBTA Fitchburg and Lowell Lines," there would be "no moderate or severe impacts from noise after mitigation was implemented;" concluding that "there would" therefore "be no disproportionate noise impacts to environmental justice populations from the proposed maintenance facility" (Section 6.5.4-1 Environmental Justice, 6-7). This "existing industrial area" is our home, which does indeed sit between Fitchburg and Lowell lines, making us an "environmental justice population." How the report can comes to the conclusion that this entitles MassDOT to *increase* our environmental burden is hard to see. This disingenuous line of argument weakens our trust in the DEIR itself and, potentially, in MassDOT itself.

I-012-004

We believe that Yard 8 is not a viable option and that whichever of the other two sites, Mirror H and Option L is chosen, MassDOT needs to minimize any adverse impact on economic development and neighborhood connectivity. The Maintenance Facility and the Green Line extension need to be planned in relation to a comprehensive envisaging of economic and neighborhood development of the Inner Belt, Brickbottom and East Somerville areas. This means far more community involvement in the process than has been encouraged to date, specifically the formation of a Citizen Advisory Committee to oversee the rest of the project and ensure that the community has a proper voice.

I-012-005

One of the faults of the DEIR is that it is often insufficiently specific about mitigation. Mitigation, especially for noise and vibration, needs to be in place before construction begins and needs to take into account the environmental effects of construction itself. There needs to be a continuing means of addressing concerns raised in the course of and after construction. It is not fair to insist that East Somerville residents anticipate every contingency that may arise. Our major concerns here at Brickbottom are with the noise and poisonous emissions produced by the diesel engines and the noise and vibrations produced by railway cars, both of which already affect the quality of our lives and, perhaps, our health. Specifically, we ask that MassDOT assign five of the new EPA Level 3 diesel rail engines to the Fitchburg Line and give the Fitchburg Line top priority for the replacement of older diesel engines. We also ask that cars be equipped with fan quieting to decrease the considerable sound made by air conditioning, with acoustical absorption under the cars, and with vehicle skirts over the wheels.

I-012-006

Finally, we ask that the review process itself be revisited. In our view, the DEIR as currently written does not serve the best interests of the project. It has too many flaws, areas of ambiguity, and misleading assumptions. With respect to the siting of the Maintenance Facility in particular, it fails to take seriously any option other than Yard 8. Far more work needs to be done on Mirror H and Option L. More importantly for your review, we believe DEIR was not done in such a way as to comply adequately with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined its mandate and responsibilities. We strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT.

3

I-012-003

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

I-012-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-012-005

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. The mitigation measures required by the Secretary's Certificate on the DEIR/EA are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Modifications to MBTA Commuter Rail equipment are outside the scope of the Green Line Extension Project. As presented in DEIR/EA Chapter 6, the Proposed Project has overall air quality benefits for the Study Area. Noise and vibration mitigation measures are proposed on a location by location basis. Noise impacts in the corridor are primarily from the existing MBTA Commuter Rail operations. Noise mitigation measures on rail transit vehicles would not be effective in reducing the total noise generated in the corridor. The proposed mitigation measures would be more effective in reducing noise impacts in the corridor.

Thank you for your attention to our concerns.

Sincerely yours,

Amy Appleford, Nicholas Watson

I-012-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

From: 01/07/2010 22:08 #009 P.003

Chandace Arledge
169 Monsignor O'Brien Highway #306
Cambridge, MA 02141

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

As a resident of the Glass Factory Condominiums and homeowner in the East Cambridge community, I am extremely concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

I-013-001

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

I-013-002

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

I-013-003

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to

I-013-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-013-002

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans will be refined in the preliminary engineering stage of the Project. The public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-013-003

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

From: 01/07/2010 22:03 #009 P.004

I-013-003 preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

I-013-004 PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-013-005 MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

I-013-006 REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,



I-013-004

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

I-013-005

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-013-006

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

From: 01/08/2010 10:28 #012 P.001

Derek Arledge
169 Monsignor O'Brien Highway #306
Cambridge, MA 02141

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-014-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

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LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

I-014-001

Please see Comment Letter I-013.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

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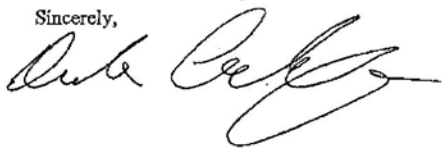
Thank you for hearing my concerns.

Sincerely,



RECEIVED

JAN 8 2010

MEPA

Janaury 8, 2010

TO: Secretary Ian Bowles
FROM: Lee Auspitz
RE: DEIR Comment

The writer of this comment is a private citizen who served as a Somerville mayoral appointee on both the Project Advisory Committee of the Beyond Lechmere Northwest Corridor Study (2004-5) and the Citizen Advisory Committee for the subsequent Green Line Extension Project (2006-9). For 35 years, from 1974-2009 he was closely involved in the Davis Square Task Force, set up to address Somerville issues arising from the Red Line Extension from Harvard Square to Porter, Davis and Alewife.

Comment overview

From a transportation planner's point of view, the Green Line Extension is an unusually straightforward and cost-effective project. It makes use of existing commuter (heavy) rail beds to extend light rail through densely populated and under-served neighborhoods of three municipalities—Cambridge, Medford and Somerville. It thus requires minimal land takings and holds great potential for improving air quality, reducing automotive traffic, upgrading existing housing stock and neighborhood business districts, serving handicapped individuals and economic justice communities, and reducing commuting time to employment, shopping, health and educational centers not only for residents of the three municipalities but also for those of the larger metropolitan area.

Yet the Extension has distinctive legal, jurisdictional, funding and phasing complexities that are not adequately dealt with in the current DEIR. Within the context of strong support for the project overall, therefore-- and faith in the corrective power of open discussion-- this comment will concentrate on three issues for which the DEIR provides a timely juncture for review by all the public authorities involved. Each of the three issues is of sufficient weight to justify reconsideration of the DEIR before final approval. A fourth comment on construction and noise-and-vibration mitigation will also be provided on the basis of the Red Line Extension experience, along with a summary treatment of a few other neglected due diligence issues raised in the citizen participation process.

A concluding remark will list some steps toward a reconfigured approach.

The issues in brief

I-015-001

1. State Implementation Plan (SIP) Compliance— There is a documentable discrepancy between the SIP requirement that the Extension go at least as far as Medford Hillside by December 31, 2014, and the foreshortened DEIR plan to make the College Avenue station in the midst of Tufts University the terminus for the 2014 phase. The attempt evident in the Expanded Environmental Notice to bridge this discrepancy by map substitution and geographical invention—re-labeling the College Avenue station as Medford Hillside-- has no place in a transparent public process. The 1993 SIP was specifically amended in the proposal of 2005 of to go beyond a previous alternative range from Ball Square to Tufts University. As the project cannot qualify for federal funding of final engineering studies until all such discrepancies are resolved, the current DEIR provides a timely opportunity for public authorities at every level to address them straightforwardly. Moreover, though it was the intent of the governor and the legislature to provide adequate financial support for SIP compliance in the Transportation Bonding Bill of 2008 (then pegged at $600M for the Green Line Extension), the bill itself contains a proviso that would, as written, reduce dollar for dollar the bonding commitment to the Green Line Extension by the amount of any federal aid received. In effect, this proviso caps the total federal-state commitment at $600M, an amount insufficient to cover the minimal SIP-related elements as presented in the DEIR. Both procedurally and financially, then, the DEIR presents a plan for which key SIP-compliance issues remain unresolved. FTA guidelines anticipate that its regional officials will flag such problems early in the process. It would start the project with a cleaner slate to address them at the draft stage before a final EIR is passed on to FTA.

I-015-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

2. Refining the Modular Approach— The DEIR gives evidence of a modular approach inadequately suited to the complex and cross-cutting legal, engineering and funding disciplines under which the project operates. The DEIR fails to distinguish adequately elements within the several engineering modules which must be completed by the December 31, 2014, SIP-mandated deadline, from those which can be phased over a longer period in a unified, federally co-funded package. The system-wide northern storage and maintenance facility, for example, is not constrained by legal mandate, engineering logic or operational necessity to be wholly completed within the 2014 deadline. Nor is federal New Starts funding limited to the SIP-mandated deadline. By contrast, state funding under the Transportation Bonding Bill of 2008 is specifically directed toward deadline-constrained SIP compliance. Yet the DEIR appears to assume that modules must either be wholly within or wholly outside the 2014 deadline, and that state and federal funding sources are equally SIP-constrained. An adequately differentiated, systemic approach to the several modules will permit the whole project to become more competitive for federal dollars. In a unified state-federal project 12/31/2014 would be a performance benchmark rather than an endpoint for the federal portion of the funding, and all modules, including the Route 16 terminus, would be phased more efficiently within a comprehensive project.

I-015-002

3. Lechmere Station Relocation-- Currently estimated to cost $160M, the long-planned relocation of the Lechmere Station across McGrath Highway has been shoehorned into a public funding package not designed to accommodate it. From 2004 through the April 2008 passage of the Transportation Bonding Bill, the Lechmere relocation costs were repeatedly represented to public advisory committees, the press and the legislature as covered by private North Point developer commitments. The collapse of the private underwriting plan led the state to assume this burden, then estimated at $70M, in August 2008 four months after the Transportation Bonding Bill was signed. The worldwide credit crisis that began in September 2008 further underlined the fragility of the North Point commercial projections. Six months later in 2009 the relocation item reappeared at more than double its previously announced cost as an abortive trial candidate for "shovel-ready" federal stimulus funding. The resulting $160M price tag has now been loaded into the SIP-constrained part of the Green Line Extension pushing out the Route 16 terminus, stripping the Union Square spur of future connection to Porter Square, and leeching out important mitigation and environmental provisions elsewhere in the project. Its late addition—and the absence of a post-bubble reanalysis of the underlying commercial and demographic assumptions of the North Point project-- raises questions about oversight and public subsidy to (in this case, non-existent) private interests. While provision obviously has to be made for the Lechmere station, MassDOT, the City of Cambridge, the MAPC and the legislature owe the public a more critical look before plunging ahead with this module as currently planned.

I-015-003

4. Mitigation as a Public Process—The DEIR gives evidence of a conscientious professional analysis of potential construction and noise-and-vibration problems from an engineering standpoint. But Section 6 neglects two non-engineering mitigation devices—citizen participation processes during construction and post-construction compensation procedures-- that have proven effective in similar contexts. An account of previously successful MBTA experiences with these devices in the Red Line Extension is provided in the detailed section that follows. Ball Square provides an example of how a public process might work for the Green Line.

I-015-004

The issues in detail

1. SIP Compliance

a) *the "Medford Hillside" issue*

The amended SIP proposal which appeared in the Federal Register of August 10, 2005, stipulated "Medford Hillside" as the required destination point, and this requirement has been properly included in all subsequent official documents, through the final approved SIP which appeared in the Federal Register of August 31, 2008 and the state Transportation Bonding Bill of 2008.

What "Medford Hillside" meant in the August 2005 amendment was "Beyond Tufts." The stated aim of the amended SIP was to extend the environmental reach of a 1993 SIP requirement that Green Line

I-015-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-015-003

The relocation of Lechmere Station is a critical and necessary component of the Green Line Extension Project. In the absence of a developer for the NorthPoint Development Project to construct the station within a defined time frame, MassDOT added the relocation of Lechmere Station to the Proposed Project. In order to meet the requirements of the SIP, relocated Lechmere Station will need to be constructed as part of the overall Green Line Extension Project. The extension of Green Line to Mystic Valley Parkway/Route 16 is not a requirement of the SIP, and the Proposed Project as defined has been demonstrated to meet the air quality benefits identified by the SIP. The extension of the Union Square branch to Porter Square has never been considered part of the Proposed Project. Finally, MassDOT has identified mitigation and environmental provisions in both the DEIR/EA and the FEIR and has committed to these measures.

I-015-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

terminate at either Ball Square or Tufts. The amendment thus provided for a more distant terminus to serve the dense non-student residential population in the Medford Hillside neighborhood beyond the University.

The geography of all this was laid out clearly in maps in Appendix B of the Beyond Lechmere study that was the point of reference for the amended SIP. Appendix B consists of "locus maps", each with a dotted circle superimposed on standard street maps to show the possible location of eight stations along the Green Line Extension. Photos of the sites were also included in an attractive montage prepared by the MBTA itself. These are reproduced in attachments to this comment.

Figure B-6, labeled "Proposed College Avenue Station Locus Map," shows the dotted circle superimposed in the Tufts University area with the center of the circle at the junction of College and Boston Avenues—the very area now proposed for the provisional terminus. (The map is attached to this comment as Scan 0001.) It was routinely referred to as the "Tufts University station" in the discussions of the advisory group, consultants and MBTA officials.

Figure B-7, labeled "Proposed Winthrop Street Station Locus Map," shows the dotted circle superimposed on an area of the map labeled "Medford Hillside" and with its center at the junction of Winthrop Street and Boston Ave. (This is reproduced as Scan 0002 attached.) It was referred to as the "Medford Hillside" station in the final discussions of the advisory group by both the representative of the City of Medford, who requested that a terminus be considered there, and the MBTA chair of the study, who promised a separate boarding analysis of it.

A blow-up of Figure B-7 is attached as Scan 0003 for convenience of viewing. It makes plain that on the same standard map the geographic center of the Medford Hillside neighborhood is given at Capen and Adams Streets (marked by a small white dot). This also comports with a standard Google walking map search, which places the heart of Medford Hillside at a 13-minute walk (i.e. outside the normal 10-minute catchment area) from the proposed College Avenue (Tufts) Station, versus a 4-minute walk from the Winthrop Street (Medford Hillside) Station.

The labeling of the Winthrop Street station as Medford Hillside was also carried through in sketching a possible heavy rail alternative (figure 4-8) on an MBTA schematic where a possible "Medford Hillside Commuter Rail Station" is placed at Winthrop Street and Boston Avenue.

In other words, Medford Hillside and Tufts University were mapped as distinct and mutually exclusive areas, each to be served by its own proposed station at two Boston Avenue intersections, Winthrop Street for Medford Hillside, College Avenue for Tufts. There was nothing novel about these usages. They corresponded—and still do-- to the MBTA bus route legend for the 94 line which then, as now, served the area and designated Powderhouse Circle, Tufts University, Medford Hillside and West Medford Square as four distinct and mutually exclusive transit zones.

In the 16 months after the advisory committee was discharged, two striking departures occurred from this accepted usage. Their combined effect was to expunge references to Tufts University at the College Avenue site and to change the station name in the heart of that University to read "Medford Hillside," so that a re-named terminus would appear to fulfill the mandate of the SIP that had been amended to go beyond Tufts. The basis for this legerdemain came in the first instance with the novel interpolation into the final report of a description of "Medford Hillside" as stretching from Powderhouse Square to West Medford Square, and including all points in between, much as "New England" includes six distinct states. Had the authors of this catch-all description discovered an ancient Viking map with all of Eastern Massachusetts labeled in runes as Medfjord Hjüllside? Was this a geographical error by some confused out-of-town consultant? Or was someone trying to be clever and keep all options open?

Whatever the cause, in the following year the all-inclusive "Medford Hillside" label was narrowed for the first time to apply exclusively to the College Avenue station. . Newly commissioned maps were drafted for the EOT by a Missouri-based consulting firm. They were at a more schematic level without the detailed street and neighborhood names of the previous MBTA maps. The label "College Ave/Medford Hillside"

was now affixed to the station in the middle of Tufts University. (See Scan 0004). In the accompanying narrative the Winthrop Street station was now explicitly declared to be a merely optional addition to the SIP. This usage was carried through fairly consistently in all subsequent project documents, with the notable exception of an unexpurgated reference in the Secretary's Certificate of 12/1/06 to a possible Green Line-commuter rail link-up at "Tufts University" (i.e. College Avenue). [And of course the executive summary to the DEIR also slips into candor when it reports about the College Avenue station that "Tufts University controls most nearby land" and again that the College Avenue terminus is "surrounded by Tufts University properties."]

I-015-005

While ordinary citizens like this writer and the Mayor of Medford continued to refer routinely to Medford Hillside as the neighborhood beginning at Winthrop Street, the EOT, as successor to the MBTA, stuck firmly to the story that transferring the Medford Hillside name to the College Avenue terminus fulfilled the amended SIP commitment to a Medford Hillside over a Tufts or Ball Square terminus.

The re-labeled schematic replaced the more detailed MBTA station locus maps when the Expanded Environmental Notice (EEN) was issued on October 1, 2006, and presented at public scoping meetings in Somerville and Medford on October 16 and November 15, 2006. During the first of these meetings a professional planner with a long acquaintance with the project as a member of the Beyond Lechmere Project Advisory Group and as chair of the MPO Transportation Planning Advisory Committee, is recorded in the transcript as calling the foreshortening of the Medford Hillside commitment to Tufts "a bit much to take."

From this point onwards, the fictitious relocation of Medford Hillside was frequently criticized in the public process. Residents of Medford Hillside presented the EOT with more than 40 archival and contemporary references testifying to the geographical fact that Medford Hillside was not Tufts and not adequately served by Tufts. The EOT responded with bland assertions that the site was "commonly" seen locally as part of Medford Hillside-- a confusion traceable perhaps to the fact that Tufts does have an area called "the Hillside", a small grassy knoll rising from Professors Row to the President's House where students can be found reading and socializing on sunny days.

Underlying this dispute were substantial planning and financial issues. The Winthrop Street station was widely believed not to be a suitable terminus on technical and traffic flow grounds, whereas a station half a mile beyond at Mystic Valley Parkway and Route 16 had great advantages over it, but at a greater cost. So the implicit and very substantial issue was whether the Extension would under-fulfill the SIP requirement by ending at Tufts (an outcome which the 1993 SIP was actually amended to preclude) or go well beyond Winthrop Street, the gateway to Medford Hillside, to Route 16, the back porch of the neighborhood, so to speak, at an extra cost.

I-015-006

Whether there are merits to a final or provisional university-based terminus is not the question in this section. The issue is whether map substitution and geographical falsification are an acceptable method of complying with a legal mandate. It is worth noting in this respect that the outgoing EOT Secretary pointedly cited the handling of the Route 16 terminus issue in his letter of departure (page 7) as a problem in the "culture of candor."

Independently of how the substantive issues are resolved, therefore, the DEIR should not be rushed to final form on the representation that a Tufts-based terminus fulfills a SIP specifically amended to supersede it.

It would be unfortunate for MEPA and others to use the fact that the misrepresentation was baked into the EEN to dodge the issue. For though there is a segment of the paper trail to explain charitably how honest people could propagate a misrepresentation of which they were unaware, it does not excuse or negate the misrepresentation once one understands that it has occurred. An analogy with counterfeit bills is germane: there is a difference between circulating counterfeit bills unawares and "uttering" (that, is knowingly circulating) them.

I-015-005

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-015-006

Please see response to Comment I-015-004.

As long as the project entertained a real possibility of going beyond Tufts by the SIP- mandated deadline, it could be argued that the geographical irregularities would have no material effect. But the DEIR has now taken a new step, not previously anticipated, of excluding Route 16 altogether from the federal New Starts application and thus postponing for five years the Green Line extension beyond the Tufts University campus. The DEIR thus makes a material departure from a legal requirement that the governor, legislature and courts have all accepted as binding.

[Sources for this section are all publicly available on the Green Line Extension Project on-line archive. Also worth noting is the DEIR description on page 5-181 of the proposed College Avenue terminus as "surrounded by Tufts University properties" as well as the parallel executive summary statement on ES-47 that "Tufts University controls most nearby land."]

b) Financial compliance

Since the Green Line Extension is among the court-mandated mitigation measures flowing from the Big Dig, the Commonwealth is committed to whatever funding is needed to meet the SIP requirements. The Governor and Legislature indeed acted in a timely and good faith manner on this obligation in enacting the Transportation Bonding Bill of 2008, which authorized up to $775M for three SIP-related projects. Of this sum $600M was the allotment for the Green Line Extension, enough to meet SIP-required elements as they were then understood. But with this proviso:

provided that any federal grants received by the commonwealth or the Massachusetts Bay Transportation Authority for the Green Line to Medford Hillside and Union Square spur project shall be applied to reduce the state authorization by that amount.

The proviso has the effect of capping the combined federal-state budget for the project at $600M. At the time $600M seemed adequate to cover the full cost of the project, so with a hoped-for 50-50 match from federal funds, the state's outlay might be as low as $300M. But now that the SIP-required elements of the project have well exceeded the $600M price tag, the proviso has the unintended effect of blocking adequate funds. By limiting the Commonwealth's ability to leverage federal New Starts funding to $300M, the proviso forces it to seek funding from other state pots, thus increasing the Massachusetts percentage share of the overall budget.

By now the consolidated budget for the project, if one includes $120M for the Route 16 terminus, is roughly double the original $600M allotment, so that costs can be covered only if the state contribution leverages federal funds in an equal amount, without any reduction of the bonding commitment. This will require both legislative action to remove the proviso and an expectation by the executive branch not to borrow less than the full amount of the bonding budget. Of course, in the event federal funding fails or is delayed the Commonwealth will have to make good on the SIP mandated elements.

I-015-007

FTA rules require that federal funds not be approved for final engineering if there are unresolved discrepancies between the SIP and the project, or if local funds are otherwise in jeopardy. The project's increased vulnerability to federal funding decisions counsels prompt attention to identifiable problems. It should also be noted that any improprieties or uncertainties in the resolution of the "Medford Hillside" or other SIP issues not only ripple forward to FTA eligibility, but backward to the state funding authorities, both legislative and executive, as the parties directly responsible for compliance.

[The writer has been informed that the three-member Somerville-Medford legislative delegation—Jehlen, Provost, Sciortino—have this week opened discussions with the relevant legislative and executive leadership on this issue, which was not flagged by EOT in September 2008 hearings on exceeding the $600M allotment.]

2 and 3. Refining the Modules:

At a site visit to the Riverside Light Rail Maintenance Facility members of the citizen advisory committee questioned VHB consultants on the technical relation of the Maintenance and Storage facility to the Green Line Extension overall. Some CAC members also undertook independent inquiries into the Boston Engine

I-015-007

It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. MassDEP concluded that the Proposed Project would meet the requirements of the State Implementation Plan (SIP).

Terminal Heavy Rail Facility. This writer has done some due diligence on the federal funding requirements and the Lechmere boarding data. From these and the informative briefings and materials in the public process itself a more differentiated picture emerges than that assumed by the DEIR in pushing the Route 16 terminus outside the federal funding package, putting the entire Lechmere Relocation budget in it, and insisting that the maintenance facility be completed on the same timetable and under the same EIR as the rest of the Extension.

First, there seems no reason to accept the assertion in the DEIR that "federal funding requirements" preclude the Route 16 terminus module from being integrated into the SIP-mandated trunk line. To the contrary, the Route 16 terminus adds mileage depth to the project that improves its rank on the crucial cost-effectiveness ratings used to compare New Start programs nationally. These ratings are based on dollars per ridership mile. They thus reward distance traveled (and auto mileage saved), not merely boardings. All other things being equal, a five-mile trip from Route 16 to North Station is worth five times a one-mile trip from Lechmere to North Station, and 25% more than a four-mile trip from Tufts (whoops, "Medford Hillside") to North Station. By contrast, modules like the Lechmere relocation and the Facility add no miles to the denominator but many dollars to the numerator. They can be loaded into the project only if there are ridership miles to counterbalance them. The maintenance facility can lay claim to "project effectiveness," but the Lechmere relocation budget, stripped post-bubble of its land use rationale, is a drag on the project's viability in competition with other projects nationally. It is impossible to judge all this exactly without having the full numbers, but insofar as the New Starts program is a numbers game the Route 16 terminus is an invaluable asset. It is important to remember in all this that the FTA New Starts program is something of a model of transparency and merit-driven decisions, so that one cannot expect elected officials in Washington to carry water for a project that does not make the grade on the published standards any more than you can get your kid into Harvard with 450 College Board scores.

I-015-008

Second, the DEIR by removing Route 16 has not taken account of the legal risk to the project posed by the "Medford Hillside" substitution. The risk exposure is $600M, the entire amount of a potential federal match for state funds. If, as seems to this writer undeniable, the College Avenue terminus can claim SIP compliance only by virtue of geographical legerdemain, or worse, the inclusion of Route 16 is a clean way to remove the project's legal vulnerability. (Another legally viable and equally straightforward alternative would be to re-amend the SIP to permit a Tufts University endpoint, as in the original SIP of 1993). So, on a second count it is the inclusion of Route 16 that meets "federal funding requirements" and its exclusion that violates them. It is worth underlining what many transportation professionals have observed: the Route 16 terminus would be worth doing without being SIP mandated and without its distinctive contribution to the cost-effectiveness ratings. It can hold its own with any station on the line on standards of environmental justice, air quality control, traffic reduction, handicapped access (the next handicapped accessible rail station to the north of it is the Anderson/Woburn commuter stop, 7 miles away), and regional centrality—serving West Somerville, West Medford, Arlington and Winchester. More than 2000 residents of these towns— a good indication of the ridership base-- have signed a petition urging its inclusion. It is a remarkable feature of this terminus that the plan for it arose from a citizen group. Their plan includes a shuttle and community path over the Mystic River that would further extend the catchment area to West Medford Square, with its commuter rail station and charming business district--the original target of the extension.

I-015-009

Third, there seems strong reason to reject the argument in the DEIR that a fully operating maintenance facility with storage for 80 cars must be completed by 12/31/2014 in order for the Green Line Extension to be operative by that deadline. To the contrary, a northern Facility, which is a desirable thing for the entire Green Line, is not, as we learned from honest engineers at Riverside, under any engineering discipline or operational necessity to be completed by a date certain. Moreover, there are different timetables and locations possible for storage and maintenance, and distinctive environmental considerations that should not further delay the SIP elements. Questioning by many public members established early and repeatedly that the Facility can march to a tune of its own. If one were prorating capital costs, as was the minuted plan in the early Green Line Extension meetings of 2007, one could perhaps justify putting as much as 40% of the maintenance facility into the Green Line Extension budget. The rest is the project's gift to the Green Line.

I-015-008

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes the Green Line Extension Project with a Medford Branch terminus at College Avenue Station. MassDEP concluded that this Project alternative would meet the requirements of the State Implementation Plan (SIP). As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010).

I-015-009

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-015-010

Fourth, one must reject flatly the DEIR assumption that a co-funded state-federal project must be completed by the SIP deadline. This deadline binds the state for SIP-related elements. The FTA is bound by SIP through the state's legal obligation to it (that is, it cannot in a rule-of-law society approve a non-compliant project for final engineering drawings). But the FTA is not precluded or discouraged from funding desirable elements outside the SIP, nor for that matter is the state, except insofar as it chooses to limit itself to what is legally required. In other words, it is administratively, financially and legally feasible to stretch the project over a longer period so that Route 16 can be moved up and non-SIP constrained elements can be moved back on the project timeline and still qualify for federal matching funds. Doing this will make the project more competitive for federal dollars and provide time to reassess elements which can become more project-effective if they are not misconstrued as SIP-mandated.

I-015-011

Fifth, there is strong reason to think that the $160M Lechmere Station Relocation project needs a thoroughgoing reconfiguration. This is not for lack of study--the work on Lechmere goes back a decade--but changes in economic reality. The "city within a city" at NorthPoint has been overtaken by events. It will have to be rethought. All over the world--from Dubai to Canary Wharf London to Boston and Allston, Massachusetts—ambitious development projects have been shelved or reconsidered in a post-bubble climate. The Lechmere scheme is weaker than most: its private funding was withdrawn while the bubble was at its height. Yet the commercial and demographic projections behind the North Point/Lechmere relocation scheme have undergone no apparent reappraisal. The relocation has simply been loaded into this project uncritically, relying on employment, demographic and commercial assumptions, well summarized in the DEIR, that are no longer plausible.

I-015-012

Sixth, the two non-SIP modules—the Facility and Lechmere relocation—are the ones most likely to benefit from a longer time horizon. The northern light rail facility discussion would be transformed if a parallel southern heavy rail location were found. As matters now stand, the MBTA is jealously guarding excess acreage in the BET yards for an expansion of heavy rail repair that it really wants to put in the south, for the same reason it needs a light rail repair facility in the north. The Lechmere station, for its part, will benefit from focusing on the vibrant East Cambridge community at its doorstep until a viable economic plan re-emerges for North Point.

I-015-013

Seventh, the project as a whole has suffered from a lack of administrative continuity at the upper echelons; or should we say frankly, it has been the victim of administrative disarray. In the course of five years the jurisdictional focus has shifted from the MBTA to EOT (under two secretaries) to MassDOT, so that it is now doubtful whether anyone can step in from on-high to make the few simple reconfigurations and refinements to enable the Extension to fulfill its considerable promise. On the other hand, there is continuity among the professionals, civil servants and citizen activists. So it is possible that a consensus of reasonable, unglamorous people in many places will reorient one of the more promising transportation projects we shall have the pleasure to shape.

4. Mitigation as a Public Process

In Chapters 4 and 5 of the report, the DEIR does a conscientious job in identifying potential construction, traffic, air quality, and noise and vibration problems, and in summary tables in Section 6 of listing appropriate mitigation measures. It also gives due attention to landscaping, historical and archeological issues, as best practice requires. But it scants two non-engineering mitigation devices: participation and compensation, two words not mentioned.

I-015-014

The rationale for seeing mitigation as a public process above and beyond the engineering problems lies in the unpredictability of human nature and events. Unanticipated problems will always arise, especially in densely populated areas. And with an involved citizenry there will also be opportunities for improvements and adjustments that can only be made on the spot with local knowledge. Moreover, there is an inherently subjective element in what constitutes a mitigation issue. Even quantified noise and vibration standards are founded in perceived tolerance levels.

I-015-010

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010).

I-015-011

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-015-012

As described in Section 3.3.2 of the DEIR/EA, the Boston Engine Terminal facility is barely adequate for current commuter rail needs. Sufficient space is not available to accommodate the Green Line Extension train storage and maintenance needs. Further, the FTA regulations state that use of both commuter rail and light rail within the same facility is incompatible.

Past experience suggests that making modest advance monetary provision for public processes can be an unusually cost-effective mitigation measure. Two devices from the Red Line Extension experience of three decades ago are worthy of consideration for the Green Line.

a) station-specific task forces

I-015-015

Modest provision for staffing station-specific task forces can be made to deal with construction, development and environmental issues as they arise. These would be unincorporated ad hoc groups that provide a venue for project contractors, local officials, police, businesses and residents to meet from time to time to review station-related issues.

They will work best in a climate of open interchange and reasonable accommodation. They do not require formal officers, dues, budgets, by-laws or votes, merely a facilitating staff presence to announce meetings, circulate minutes, invite guests, follow-up on consensus measures.

The Davis Square Task Force, funded originally in 1974 through the MAPC in connection with Red Line Extension, provides an example that has had continuing durability over a 35-year span, addressing transit-oriented development, traffic, community path, policing and other community issues long after the tunneling and blasting for the Red Line had ceased. Of course, some Green Line stations may have task forces that disband shortly after construction and post-construction issues are resolved, and Tufts may prefer to handle issues relating to the College Avenue station largely as a University-to-MBTA negotiation, since that station, as the DEIR correctly notes, is almost wholly surrounded by University land.

The example of Ball Square presents itself as one that has already shown promise for a task force type approach. In heavily attended public meetings sponsored by EOT there was early consensus in opposition to a proposed station siting outside the business district and in favor of a centrally located stop on Broadway. The consultants responded with plans that met these wishes.

The agreed solution, as presented in the DEIR, has broad support. But it will require bridge reconstruction and takings that will generate further issues during construction, and continuing traffic and parking discussion after the 2014 opening. The disruption of traffic during construction can be fatal to businesses of the kind that have thrived in Ball Square, so early notification of what is in store will be especially useful. This would be the first duty of a staff person shared with other station-specific task forces.

In the case of Ball Square it should be noted that though the actual station is in Somerville, much of the impact will be in Medford, so issues will cross jurisdictional lines. A similar Somerville-Medford situation holds at Route 16, and between Somerville and East Cambridge at Union Square. The sponsoring jurisdiction can thus be a regional agency, a lead municipality, a non-profit contracted for this purpose, or a two-city letter of understanding.

b) *Noise and vibration*

I-015-016

At an EOT public meeting on March 11, 2009, this writer read and submitted in writing the following suggested wording for the DEIR:

"In the event mitigation measures are insufficient to bring noise and vibration within the targeted levels, there will be pre-agreed procedures for compensating affected resident abutters without their having to resort to costly legal action, without abridging their right to such action."

The explanation was that "previous experience suggests that noise and vibration estimates change during construction and operation due to geological, landscaping, equipment, scheduling and other factors."

This, too, draws on a successful device used in the Red Line Extension. Prior to completion of construction, the MBTA agreed that after the subway was in operation there would be an open period for retesting noise and vibration levels for compliance with targeted standards. Any impacted homeowner could request an evaluation. If the original targets had not been achieved, the MBTA had a set period in

I-015-013

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-015-014

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-015-015

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-015-016

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

which to remedy the problem at its own cost (e.g. with adjustment of systemic barriers, soundproofing of individual homes). If mitigation measures proved insufficient, there were provisions for monetary compensation.

This procedure successfully held the relevant engineers to their own pre-defined standards. As a result, this writer can recall only two Somerville homes that reached the point of requiring (moderate) monetary compensation for post-construction noise and vibration, and no cases of litigation on these issues—in a project far more expensive, complex, disruptive and fraught with engineering problems than the proposed Green Line Extension.

This forgotten model may compare favorably with the more recent Green Bush Line issuance of $5-50,000 mitigation checks to residential abuttors. But that precedent, too, may have lessons for the Green Line and should be reviewed.

Since the DEIR makes a plausible case for high confidence in its technical noise and vibration solutions, there should be no difficulty in making advance provision for compensation in the unlikely event they fall short.

Conclusion

Here is a checklist of action items that flow from this comment. They are not all appropriate to MEPA, but as this is the only opportunity given us for a formal comment, the writer trusts that others will also consider them:

I-015-017 | 1. Fix the Medford Hillside map substitution problem in a non-defensive way that re-establishes not merely the legality but the integrity of the project.

I-015-018 | 2. Fix the legislative proviso blocking the state from leveraging federal funds.

3. Put the Route 16 Terminus back into the federally funded package.

I-015-019 | 4. Put the storage and maintenance facility on a separate schedule and environmental process

I-015-020 | 5. Encourage (outside the project of course) the identification of a southern heavy rail maintenance facility to supplement the Boston Engine Terminal, so that a vacant 25% of that acreage can house the light rail facility

I-015-021 | 6. Re-assess the Lechmere relocation scheme and withhold its more ambitious features until they are validated by private funding or local bonding.

I-015-022 | 7. Reserve a small percentage of the four-year budget for staff back-up to citizen participation in public mitigation processes

I-015-023 | 8. Ditto for noise and vibration compensation and in-kind mitigation.

I-015-024 | 9. Use any lard cut from the Lechmere scheme or prorated out of the maintenance facility to

- --engineer Union Square for future link-up with Porter Square
- --firmly commit to community paths
- --provide lacking amenities—tool booths, rain cover—to a less grandiose Lechmere station
- --assure that the stations do not skimp on art, landscaping, lighting, bicycle parking, cross walks, emergency telephones, fare machines, rain shelters, cameras, handicapped access.

My thanks for the kind consideration of the reader(s).

Lee Auspitz

I-015-017

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

I-015-018

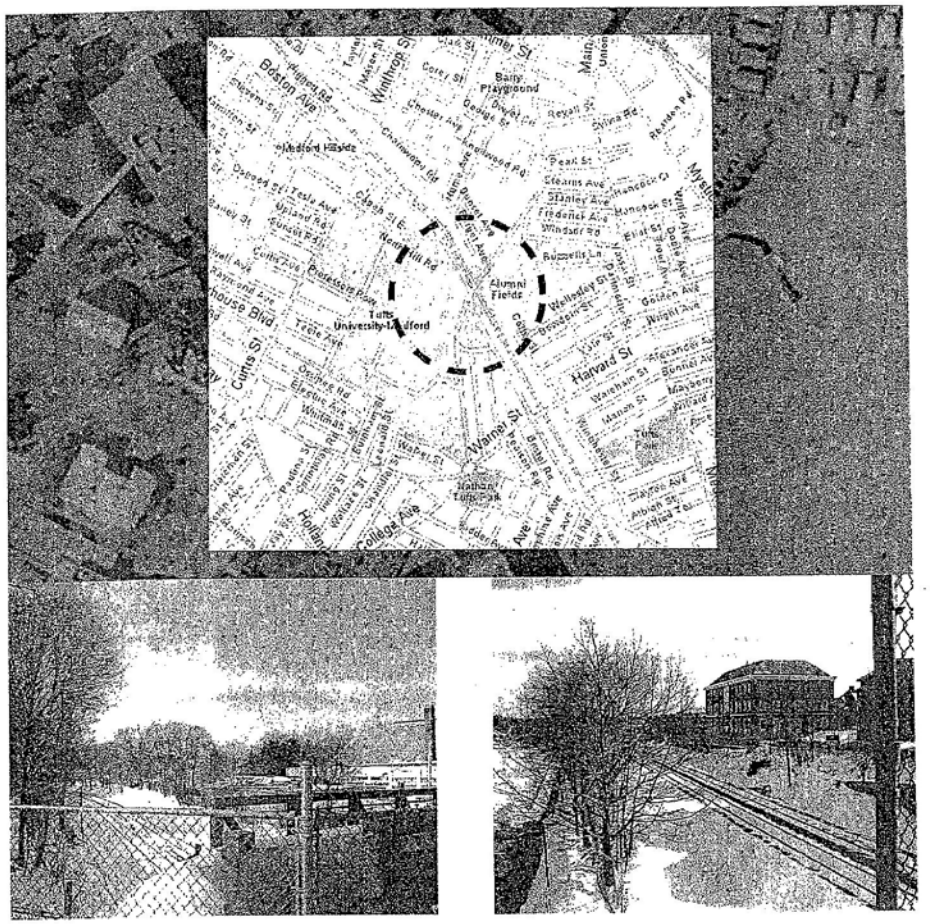
MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-015-019

The new Green Line storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility.

I-015-020

The Boston Engine Terminal (BET) and major modifications to its operations are beyond the scope of the Green Line Extension Project. MassDOT will continue to coordinate with the MBTA to explore possibilities for shared facilities between the Green Line Extension storage and maintenance facility and the BET.



Beyond Lechmere Northwest Corridor Study

Figure B-6

Proposed College Avenue Station
Locus Map

Massachusetts
Bay
Transportation
Authority

I-015-021

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-015-022

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

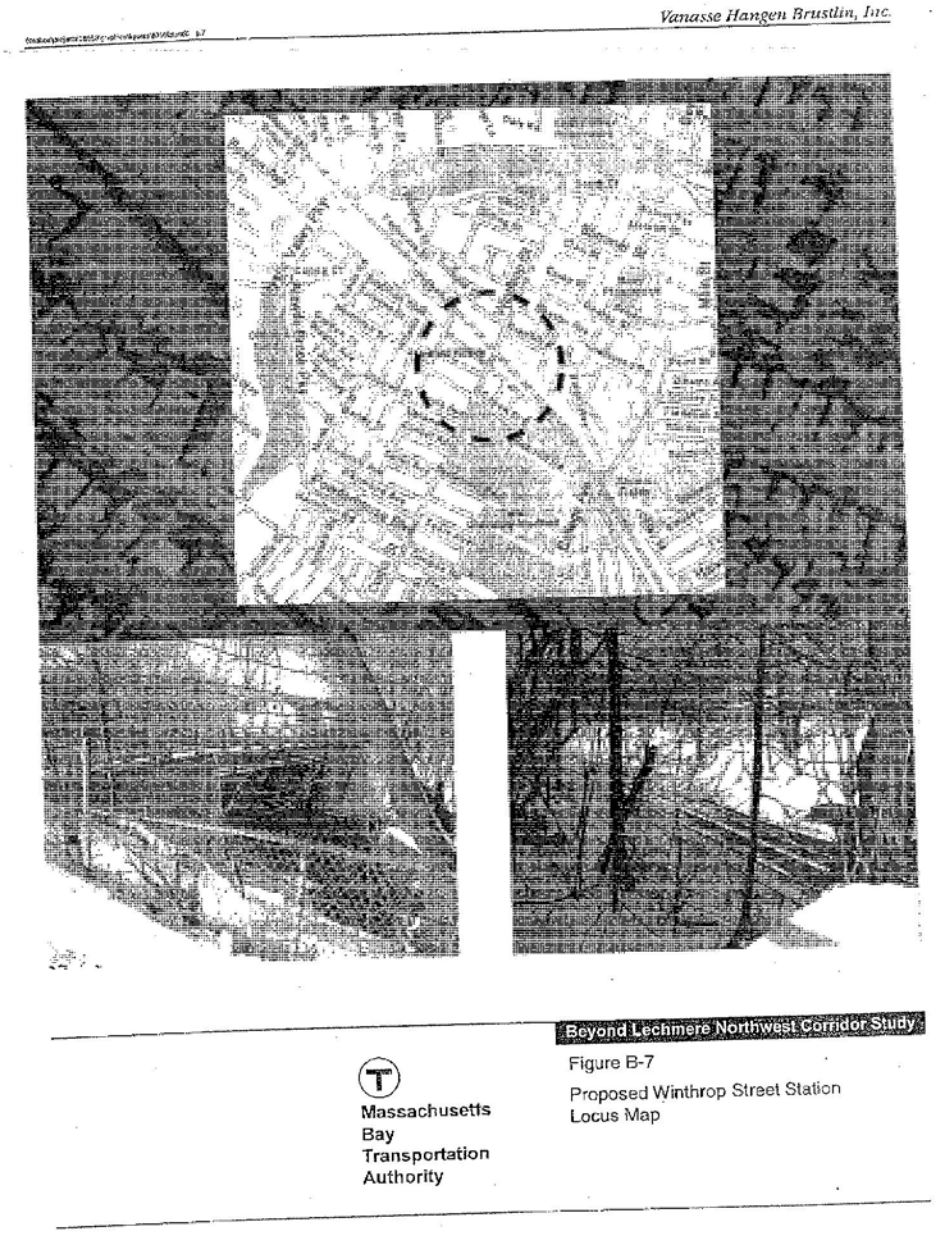
I-015-023

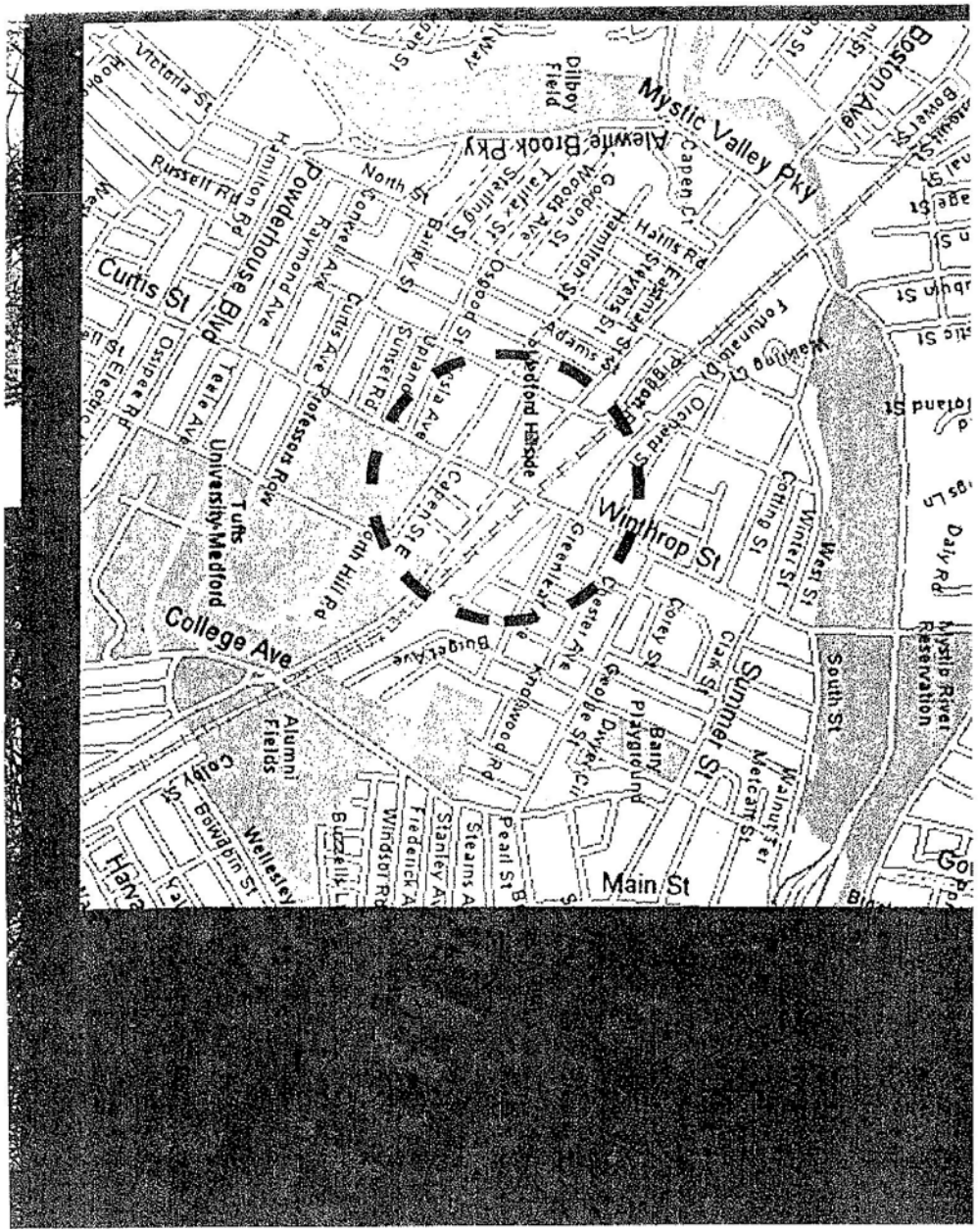
As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

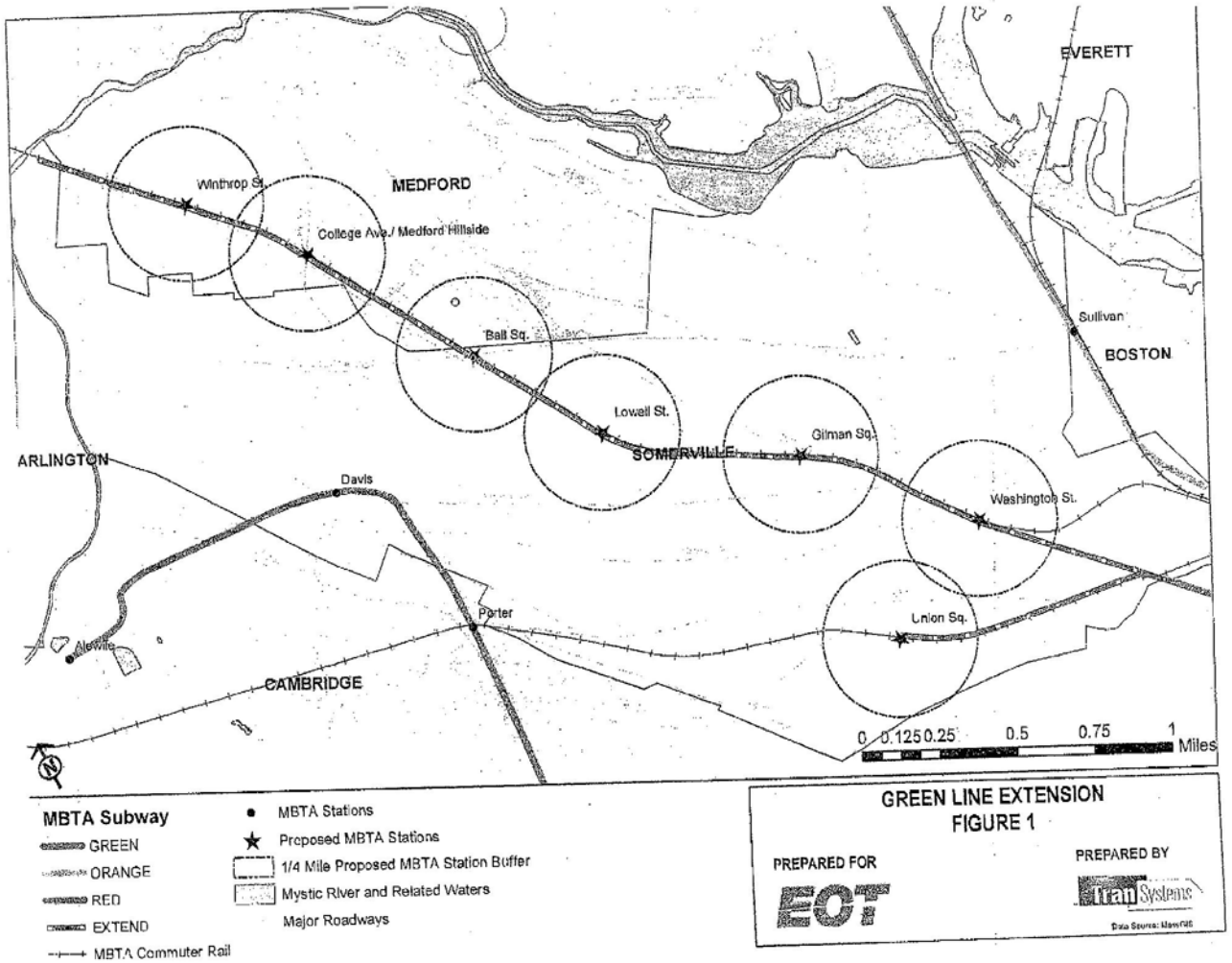
I-015-024

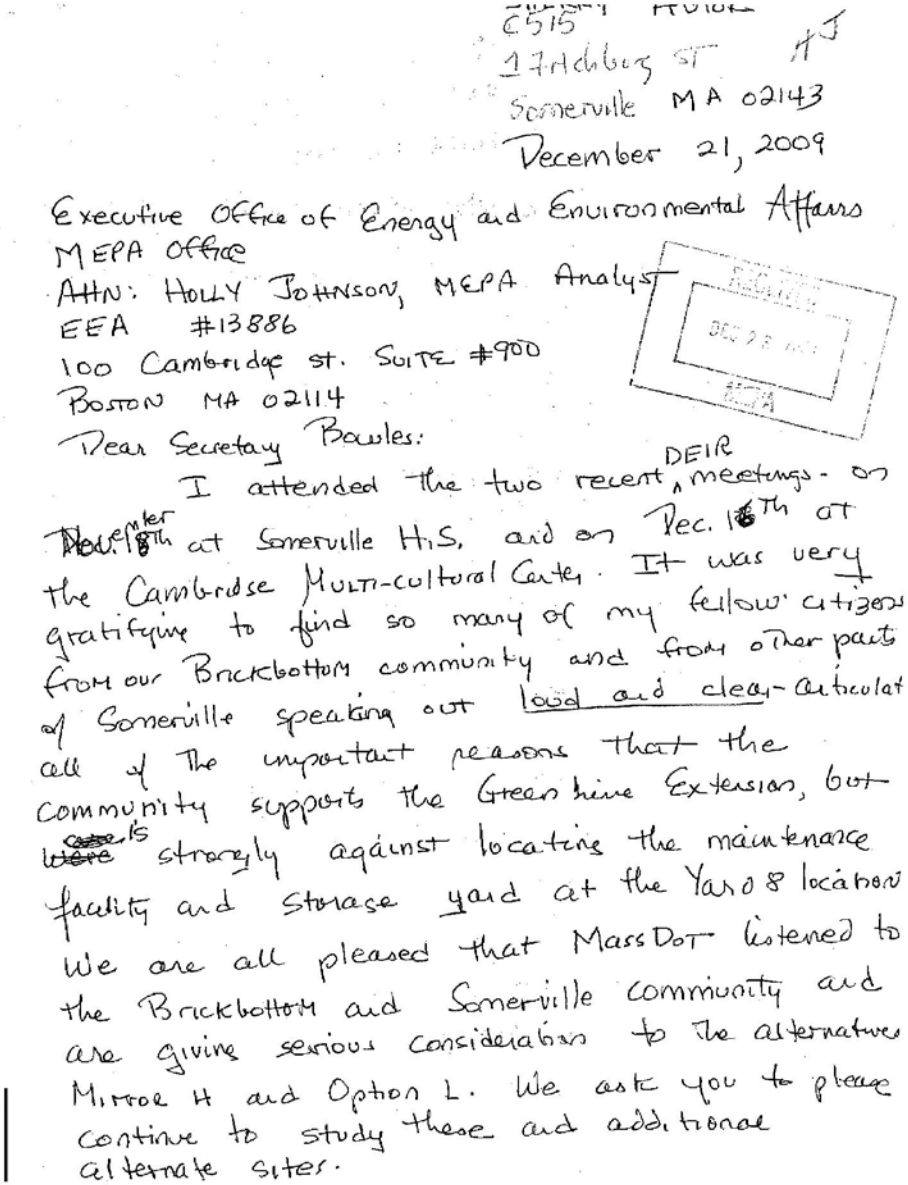
The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local

communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.




Mystic Valley Pky
Alewife Brook Pky
Boston Ave
Dilboy Field
Victoria St
Russell Rd
Hamilton Rd
Powderhouse Blvd
North St
Curtis St
Raymond Ave
Conwell Ave
Curtis Ave
Bailey St
Sterling St
Woods Ave
Gordon St
Hamilton St
Capen Ct
Harris Rd
Eastman St
Stevens St
Adams St
Fortunato Dr
Wawing Ct
Orchard St
Upland St
Sunset Rd
Osgood St
Medford Hillside
Teele Ave
Ossipee Rd
Professors Row
Tufts University-Medford
Capen St E
North Hill Rd
Winthrop St
Greenleaf Ave
Cotting St
Winter St
West St
Daly Rd
College Ave
Buget Ave
Chester Ave
Coley St
Clark St
Summer St
South St
Mystic River Reservation
Alumni Fields
Colby St
Bowdoin St
Wellesley
Windsor Rd
Frederick Av
Stanley Av
Stearns Av
Pearl St
Bailey Playground
Dwyer Cir
Walnut Ter
Metcalf St
Main St


EVERETT
MEDFORD
Winthrop St.
College Ave./ Medford Hillside
Ball Sq.
Sullivan
BOSTON
Lowell St.
SOMERVILLE
Gilman Sq.
ARLINGTON
Davis
Washington St.
Porter
Union Sq.
Alewife
CAMBRIDGE
0 0.125 0.25 0.5 0.75 1 Miles
MBTA Subway
GREEN
ORANGE
RED
EXTEND
MBTA Commuter Rail
MBTA Stations
Proposed MBTA Stations
1/4 Mile Proposed MBTA Station Buffer
Mystic River and Related Waters
Major Roadways
GREEN LINE EXTENSION
FIGURE 1
PREPARED FOR
EOT
PREPARED BY
Data Source: MassGIS



C515
17 Fitchburg St #J
Somerville MA 02143
December 21, 2009

Executive Office of Energy and Environmental Affairs
MEPA Office
ATTN: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St. Suite #900
Boston MA 02114

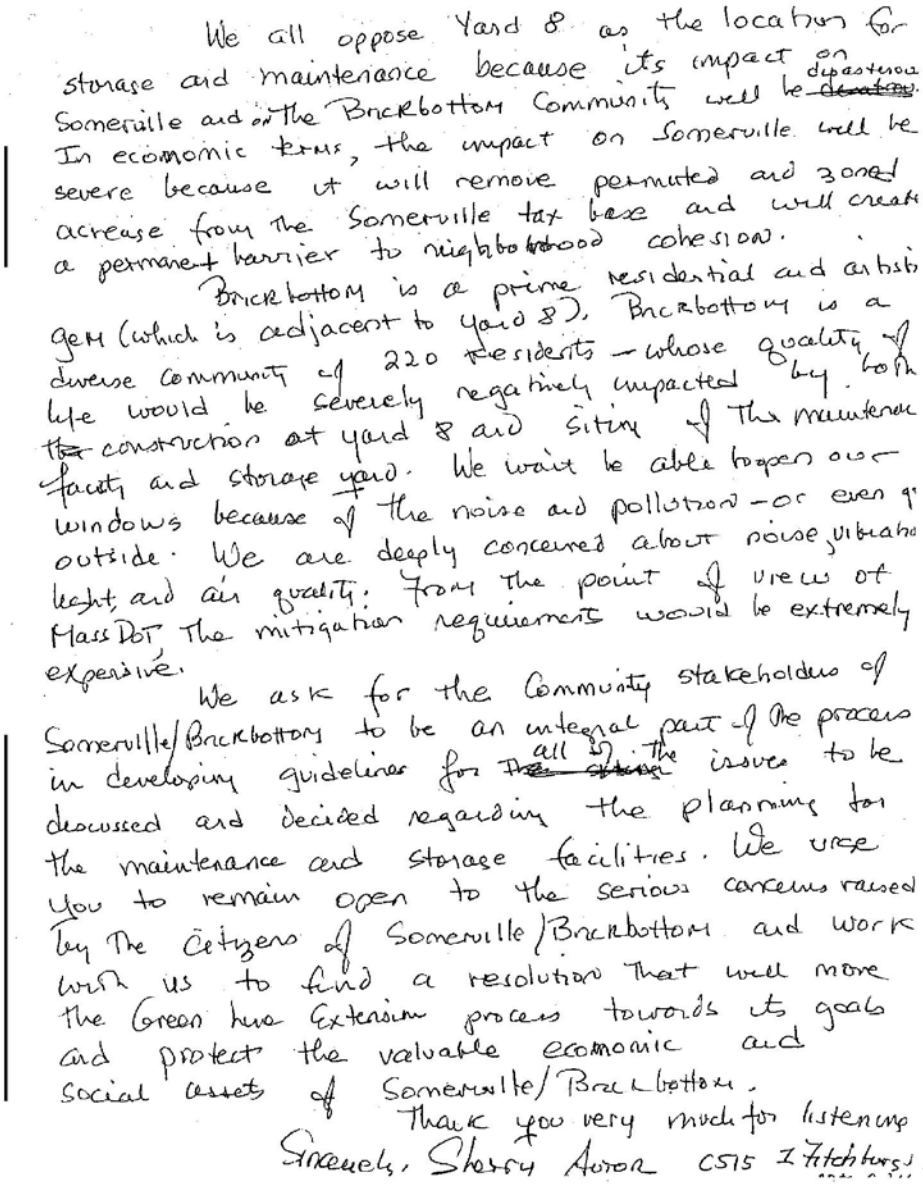
Dear Secretary Bowles:

I attended the two recent DEIR meetings - on ~~Dec.~~ November 18th at Somerville HiS, and on Dec. 15th at the Cambridge Multi-cultural Center. It was very gratifying to find so many of my fellow citizens from our Brickbottom community and from other parts of Somerville speaking out loud and clear - articulating all of the important reasons that the community supports the Green Line Extension, but ~~were~~ is strongly against locating the maintenance facility and storage yard at the Yard 8 location. We are all pleased that MassDOT listened to the Brickbottom and Somerville community and are giving serious consideration to the alternatives Mirror H and Option L. We ask you to please continue to study these and additional alternate sites.

I-016-001

I-016-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



We all oppose Yard 8 as the location for storage and maintenance because its impact on Somerville and the Brickbottom Community will be disastrous. In economic terms, the impact on Somerville will be severe because it will remove permitted and zoned acrease from the Somerville tax base and will create a permanent barrier to neighborhood cohesion.

Brickbottom is a prime residential and artist gem (which is adjacent to yard 8), Brickbottom is a diverse community of 220 residents — whose quality of life would be severely negatively impacted by both the construction at yard 8 and siting of the maintenance facility and storage yard. We will be able to open our windows because of the noise and pollution — or even go outside. We are deeply concerned about noise, vibration, light, and air quality. From the point of views of MassDOT, the mitigation requirements would be extremely expensive.

We ask for the Community stakeholders of Somerville/Brickbottom to be an integral part of the process in developing guidelines for all of the issues to be discussed and decided regarding the planning for the maintenance and storage facilities. We urge you to remain open to the serious concerns raised by the citizens of Somerville/Brickbottom and work with us to find a resolution that will move the Green Line Extension process towards its goals and protect the valuable economic and social assets of Somerville/Brickbottom.

Thank you very much for listening.

Sincerely, Sherry Aaron 0515 Fitchburg St

I-016-002

I-016-003

I-016-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-016-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

From: 01/07/2010 22:05 #009 P.013

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-017-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-017-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Signature

AZIZE

Print Name

169 MONSIGNOR O'BRIEN

Address

Johnson, Holly (EEA)

From: Christopher Bader [cbbader@gmail.com]
Sent: Friday, January 01, 2010 1:55 PM
To: Johnson, Holly S (ENV)
Cc: Debra Beard-Bader
Subject: Green Line Extension Draft Environmental Impact Report (DEIR)

Dear Ms. Johnson,

I-018-001 As Medford residents, we urge you to reject the current Green Line Extension Draft Environmental Impact Report (DEIR).

I-018-002 The report does not address any of the issues relating to extending the Green Line to Route 16, as required by law.

Christopher Bader
Debra Beard-Bader
298 High Street
Medford, MA 02155
(617) 417-1226

I-018-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-018-002

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

I-019-001

01/06/2010 16:01 FAX 6176210735 John Baehrend 001/00

JOHN BAEHREND

169 Msgr. O'Brien Hwy
Apartment 804
Cambridge, MA 02141
617-784-7130
Baehrend@gmail.com

January 6, 2010



Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

As a resident of the Glass Factory Condominiums, I am deeply concerned about the placement of the Green Line Extension and the design of the new Lechmere Station.

TRACKS TO CLOSE TO OUR BUILDING.
Present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible, to improve noise abatement and vibration concerns.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close that it appears to be part of our condominium building. Please place the station closer to the new East Street, where it could be a well designed portal to the eventual North Point development.

ASSOCIATED BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic directly under our windows. Bus traffic noise and fumes are a great concern.

TREES.
Presently there is a row of trees behind our building. We urge you to run the track on the far side of this row of trees to help with screening and noise abatement.

GREEN SPACE AND PARKING LOT
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension. The present large commuter parking lot will not be an amenity for the new North Point, but additional green space would be an enhancement rather than a detraction.

Thank you very much for your public process, listening to our voices and hearing our concerns.

John Baehrend

John Baehrend

I-019-001

Please see Comment Letter I-013.

December 21, 2009

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02108

RE: Project Number EEA #13886

Dear Secretary Bowles,

I am an occupant in the Brickbottom Artists Building in Somerville and a strong proponent of the Green Line Extension project. I am a frequent user of public transportation and use it to commute to work, get to entertainment venues and get to the airport. I believe the Green Line Extension project is an important step towards increasing accessibility to public transportation.

I-020-001 Although I support the Green Line Extension project, I am highly concerned with the Department of Transportation's position on the placement of the maintenance facility and storage yard in the parcel known as "Yard 8". The residential environment could be destroyed by this proposal. This is especially true because there is significant evidence that other locations such as the Option L location could also meet the facility's need while having much less environmental impact on the surrounding community.

I-020-002 The "Yard 8" location directly abuts the only residences (200+ occupants) in the surrounding area. Selection of that site would have significant noise and vibration impacts on these residences. Even with significant mitigation such as replacement windows to reduce noise, quality of life will be negatively impacted since those mitigation actions would do nothing for occupants when they would open their windows in the warmer summer months. Selection of the Option L location would not have the same impacts and would require far fewer mitigation steps.

I-020-003 In addition as the Commonwealth moves to being more of a service and "clean" economy, it makes no sense to create a new industrial zone located directly adjacent to an existing residential complex when an alternative site offers largely the same potential without the environmental and community impacts. A quick comparison of the options highlights the negative impacts of selecting Yard 8 for the maintenance and storage facility.

	Yard 8	Option L
Impact to residents	**High** – Site directly abuts the only residences in the surrounding area. Noise and vibration impacts will be significant and even with significant mitigation, quality of life will be negatively impacted	**Low** – Site is reasonably far from any residences. Noise and vibration impacts should be minimal and may require little mitigation
Loss of development potential	**High** – Surrounding properties will likely remain industrial rather than converting to higher value office / commercial	**Low** – Area is bounded by I-93 and proposed large-scale mixed use development
Property tax loss – direct	**High** – Currently zoned commercial	**Low** – Currently owned by government agencies
Property tax loss – indirect	**High** – Surrounding commercial and residential areas will likely face reduced valuations	**None** – Location is already industrial train location bounded by I-93 and large-scale mixed use development

I-020-004 Given these facts, I strongly urge you to support the Option L location for the maintenance facility which minimizes the negative impacts on the community.

Thank you for your consideration and time on this extremely important matter.

Cheryl Bakey

I-020-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-020-002

Please see response to Comment I-020-001.

I-020-003

Please see response to Comment I-020-001.

I-020-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

From: 01/08/2010 09:57 #011 P.005

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-021-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

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PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-021-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Jason Baklavas
Signature

Jason Baklavas
Print Name

169 Monsignor Obrien Hwy #415
Address



The Executive Office of Energy and Enviornmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I write to express my support for the extension of the Green Line but to express my opposition to locating the Maintenance Facility at Yard 8.

I-022-001 As an owner of a unit at Brickbottom, one of the founding members, and an artist, I do not endorse or support having the Maintenance Facility located in such close proximity to Brickbottom. As State Rep and Cambridge City Councilor Tim Tommey was quoted in a Cambridge Chonicle article about the recent meeting at the Cambridge Multicultural Center ," I haven't found one person yet who supports Yard 8." If that is the case, how is it that the state is still considering Yard 8?? What was the purpose for all the meetings, if the state is not going to let public opinion have any influence? Why is it that the state appears to be favoring Yard 8 as the site rather than Option L or Mirror H?

There is no way to describe to you how challenging it was to create this artist building. We have created this thriving art community from a very harsh urban neighborhood. Putting up the facility so close to Brickbottom will negatively affect the Brickbottom community and neighborhood.

I-022-002 Secondly, not only would the Maintenance Facility at Yard 8 cause much noise and vibration to the quality of life at Brickbottom, it would create a barrier between the Brickbottom area and the Inner Beltway. It would negatively impact development connecting those two areas and therefore affect the future tax revenue as the facility impacts adjacent property value and future growth potential.

Union Square was featured several years back in the London Financial Times as having much real estate potential for developers and buyers. East Somerville is in very close proximity to two of the most respected and renowned universities in the world. The neighborhood of Brickbottom is a scant mile or so from these institutions and from Union Square. Why not make the Maintenance Facility a 'win-win' that will build on and add to the very high quality of neighboring public and private urban space of Union Square, MIT, and Harvard? A project of this scale as the Green Line Extension and the Maintenance Facility are a once in a lifetime opportunity to create change in a way that improves the quality of life of all the areas involved and impacted!

I-022-003 This is not an all or nothing situation. The state has alternative sites. Mirror H and Option L would work much better by not negatively impacting a neighborhood, nor would these sites prevent future development and enhanced tax revenues for the Inner Beltway. Do not be tricked into quick fixes that will, in the end, be devolutionary change. Thank you for your consideration of this request and to your response to my questions.

Sincerely,

Sarah Bapst
C-102
Brickbottom Artists Building
One Fitchburg Street C-102
Somerville, MA 02143

I-022-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-022-002

Please see response to Comment I-022-001.

I-022-003

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

The Executive Office of Energy and Enviornmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Ian Bowles,

I-023-001

I write to express my support for the extension of the Green Line but to express my opposition to locating the Maintenance Facility at Yard 8.

As an owner of a unit at Brickbottom, one of the founding members, and an artist, I do not endorse or support having the Maintenance Facility located in such close proximity to Brickbottom. As State Rep and Cambridge City Councilor Tim Tommey was quoted in a Cambridge Chronicle article about the recent meeting at the Cambridge Multicultural Center ," I haven't found one person yet who supports Yard 8." If that is the case, how is it that the state is still considering Yard 8?? What was the purpose for all the meetings, if the state is not going to let public opinion have any influence? Why is it that the state appears to be favoring Yard 8 as the site rather than Option L or Mirror H?

There is no way to describe to you how challenging it was to create this artist building. We have created this thriving art community from a very harsh urban neighborhood. Putting up the facility so close to Brickbottom will negatively affect the Brickbottom community and neighborhood.

Secondly, not only would the Maintenance Facility at Yard 8 cause much noise and vibration to the quality of life at Brickbottom, it would create a barrier between the Brickbottom area and the Inner Beltway. It would negatively impact development connecting those two areas and therefore affect the future tax revenue as the facility impacts adjacent property value and future growth potential.

Union Square was featured several years back in the London Financial Times as having much real estate potential for developers and buyers. East Somerville is in very close proximity to two of the most respected and renowned universities in the world. The neighborhood of Brickbottom is a scant mile or so from these institutions and from Union Square. Why not make the Maintenance Facility a 'win-win' that will build on and add to the very high quality of neighboring public and private urban space of Union Square, MIT, and Harvard? A project of this scale as the Green Line Extension and the Maintenance Facility is a once in a lifetime opportunity to create change in a way that improves the quality of life of all the areas involved and impacted!

This is not an all or nothing situation. The state has alternative sites. Mirror H and Option L would work much better by not negatively impacting a neighborhood, nor would these sites prevent future development and enhanced tax revenues for the Inner Beltway. Do not be tricked into quick fixes that will, in the end, be devolutionary change. Thank you for your consideration of this request and to your response to my questions.

Sincerely,

Sarah Bapst
C-102
Brickbottom Artists Building
One Fitchburg Street C-102
Somerville, MA 02143

I-023-001

Please see Comment Letter I-022.

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

I strongly support the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville and believe its positive environmental impacts greatly exceed the potential negative impacts. However, I cannot support the Draft EIR because of various shortcomings and omissions in the design.

I will be submitting my comments on the design and the Draft EIR in more than one letter, this one concentrating on the extension of the Somerville Community Path and bicycle and pedestrian issues. Thanks you very much for considering these comments.

First the main points on Design, Funding and Construction (followed by details):

I-024-001
- I think that the Community Path design from Lowell St. to Washington St. as shown in Appendix E of the DEIR is excellent. Its implementation will be a great benefit for the Green Line and its ridership as well as an asset to Somerville and the region. As the location of the support facility is finalized, the route of the Community Path from Washington St. to Lechmere in Cambridge should be re-evaluated.

I-024-002
- The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT.

I-024-003
- That for cost efficiencies and technical necessities, the Green Line and Community Path extensions will be constructed as one project and must clearly be described as such by MassDOT.

I-024-004
- MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding for allowed bicycle and pedestrian access costs.

I-024-005
- The planned amount of bicycle parking is insufficient and pedestrian connections to some of the stations could be better designed. Also, the DEIR does not show at all how bus connections will be made to the new stations. I look forward to those improvements during the final design process.

Now the details:

Funding and the Importance of the Community Path – If funding is not available at the right time such that the Community Path can be constructed along with the Green Line, it

I-024-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-024-002

Please see response to Comment I-024-001.

I-024-003

Please see response to Comment I-024-001.

I-024-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-024-005

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station

likely will never be built as it will cost many times more to construct it as a separate project. The City of Somerville has about $3 million for the $15 - $20 million Community Path extension estimated cost. The reasons that I feels that this request for State and Federal transit funding is reasonable and appropriate are as follows:

I-024-006

- The Community Path will provide desirable off-road bicycle and pedestrian access to the stations, offering superior connections to the neighborhoods (like in Davis Sq. where 60% of the residents use public transportation and thousands walk and bike to the station each day), thereby attracting more riders in a very cost-effective manner. More riders means a greater change of getting federal New Starts funding.
- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is in integral part of the station access, allowing the Davis Square station success to be replicated.

I-024-007

- The only way the Path can realistically be constructed is together with the Green Line extension.
- Many other amenities not absolutely needed for the Green Line extension have been included (car drop-offs, redundant elevators and escalators, storage for twice as many Green Line cars as necessary, station fare collection rather than on-board, etc.) So its also reasonable that Community Path costs also be included.

I-024-008

- The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop … may be eligible for FTA funding" http://edocket.access.gpo.gov/2009/E9-27240.htm
- There are at least 2 precedents in the Boston area for community paths constructed and paid for by transit projects:
  - The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
  - The Southwest Corridor Path alongside and over the Orange Line

There are many recent examples around the country of paths being built together with mass transit expansions:

- The Capital Crescent trail alongside the planned light-rail Purple Line in suburban Washington DC includes trail construction is part of the project and the cost estimates that will be submitted for New Starts funding from the federal government.

  http://purplelinemd.com/images/stories/purpleline_documents/deis/deis/10_chapter5.pdf
  http://purplelinemd.com/images/stories/purpleline_documents/deis/Conceptual%20Plans%2009%202008.pdf

- Bicycle and pedestrian path alongside the light-rail Expo line in Los Angeles:
  http://buildexpo.org/gallery.php
  http://metro.net/projects_programs/exposition/feis.htm
- A world-class bikeway was built alongside and integrated with stations on the 14-mile Orange Line BRT corridor in LA:

  http://www.streetfilms.org/las-orange-line-bus-rapid-transit-plus-bike-path/

concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-024-006

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-024-007

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-024-008

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-024-008

The Somerville Community Path is a critical piece of the following regional and State-wide bicycle and greenway plans.

- The Massachusetts Bicycle Transportation Plan (page 30 and 45 and Figure 4): http://www.massbikeplan.org/_docs/Massachusetts%20Bicycle%20Plan%20with%20Links%20to%20Graphics.pdf
- The Somerville Community Path as part of the critical 104-mile east-west Mass Central Rail Trail (Figures 4.1 and 4.2): http://www.masscentralrailtrail.org/
- The City of Somerville's Open Space and Recreation plans list the Community Path
- The Mystic Valley Case Statement for Active Transportation for the Mystic River Communities: http://www.railstotrails.org/resources/documents/whatwedo/case_statements/Vision%20for%20July%2010th%20draft.pdf
- The 2007 MAPC Regional Bicycle Plan - http://www.mapc.org/transportation/trans_alternatives/Bike_plan_PDFs/Bike_Plan_FINAL_version_3-14-07.pdf

I-024-009

Community Path from Lowell St. to Route 16: The MEPA certificate said that the environmental review would include evaluation of continuing the Community Path west of the Lowell St. station to Medford. The study results that were presented (Appendix E of the DEIR) concluded that the width of the ROW was insufficient to provide such a continuous Path. However, since there are some sections where there is enough width; a route, perhaps with connection to local streets, should be studied further.

I-024-010

Community Path from Route 16 to West Medford: Section 3.2.3 of the RFP said that VHB should study *"Using the bikeway/pathway guidelines, consider options for providing pedestrian connections to the West Medford commuter rail station and evaluate the viability and potential impacts of including a community path in this section of the project area."* This seems not to have been done but should be. Such a Path would make a transfer connection from Route 16 to West Medford. Therefore MassDOT should plan for a community path to connect the Route 16 terminus to West Medford via an overpass of Route 16, a bridge over the Mystic River and a route along the Lowell commuter rail tracks.

I-024-011

Access to Route 16 Station - The plans in the DEIR document do not show how Green Line riders will safely access the Route 16 station from Arlington and Medford and from the Alewife Brook paths that are being improved as part of a $3.6 million ARRA stimulus project. A multi-use path for pedestrians and bicyclists to the station should be included in the design from the Alewife paths to the station. Please request that MassDOT perform this design.

I-024-012

Bicycle Parking - The amount of bicycle parking presently described in the plans (270 spaces) is very welcome but will be insufficient for the expected number of bicyclist coming to the stations. 270 spaces is only about 1% of the expected ridership. Based on the present parking at Red line stations, bike parking at 3-5% of ridership will soon be needed. Therefore I request that the amount of bike parking be increased to approximately 5% at the Union Square, Route 16 and Lowell St. (major intersection with Community Path) stations and 3% at the remainder. Also, the location of the bicycle parking (where specifically shown in the plans) are good at some locations but not at others. The bicycle parking locations should be as close to as possible to the entrance and in well lit and safe locations. Lastly, bicycle parking should be covered if at possible.

I-024-009

DEIR/EA Section 3.8.2 and Appendix E include an analysis of this potential community path connection to Medford. As presented in the analysis, a community path along the Green Line Extension Medford Branch corridor north of Lowell Street Station is not viable due to right-of-way constraints. The analysis also concluded that adjacent Boston Avenue has insufficient pavement width for a community path or on-street bicycle lanes.

I-024-010

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. Designing the Community Path for this segment is therefore also not part of the Proposed Project.

I-024-011

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. In the interim, MassDOT proposes a community planning process for the area of a future Mystic Valley Parkway/Route 16 station to cover issues relating to station design and layout, neighborhood impacts, attendant economic development, access for pedestrians and bicyclists, and other area planning issues.

I-024-012

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the

I-024-013

Improved pedestrian and bicycle access – access could be vastly improved at some of the stations by having more than one entrance or access point such as:

- a direct connection from the Gilman Square station to the Somerville High School/Library/City Hall complex)
- the Washington St. station design which seems particularly poor in this regard for riders coming from the west and north. This could be greatly improved by locating the station directly above Washington St. where direct access via elevator would be possible (earlier designs included such a layout).
- station designs (specifically College Ave and Washington St.), where drop-off (kiss and ride) stops are directly in front of the entrance while pedestrian access is a long and involved route.
- Lowell St. station where a direct connection to the platform from the Path coming from Cedar St. would be possible via a safe crossing of one track. MassDOT has said this would not be allowed because of safety concerns even though every light rail system in the US (including in Boston – see the Longwood stop on the Green Line and stops on the Mattapan line) allows crossing of tracks for access. There s Even if MassDOT will not allow this access point at this time, the Lowell St. station platform should be designed for such future access.
- In general, pedestrian and bicycle access should be given higher priority in these "community-based" station designs that motor vehicles connections.

I-024-014

Community Path costs – I understood that the marginal (extra) costs for constructing the Community Path between the stations was to be provided but I don't see them in the DEIR. They should be provided.

I-024-015

Community Path Route from Washington St. to Lechmere - the Somerville Community Path route should connect the Washington St./Brickbottom station, the Brickbottom community and Inner Belt to Lechmere. The present plans do not make these connections. If the proposed Yard 8 location for maintenance and storage facility is "dropped", better routes for the Community Path (such as along the Green Line to Brickbottom and over the former Red Bridge location) that do make these connections are possible. The Green Line extension plans should state that this re-evaluation will be done.

In conclusion, while I realize that a 10% design stage cannot contain all the details everyone would like, I feel that stating these many improvements is necessary for the final EIR and the subsequent final design in order to achieve a first class transit system.

Thank you very much.

Sincerely,

Susanna Barry and Seth Boyd
109 Willow Avenue #2
zanbarry@yahoo.com

methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-024-013

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-024-014

The preliminary construction costs ($16M) for the Community Path from Central Street to the Inner Belt area are provided in the DEIR/EA Section 3.8.1. This preliminary cost does not include land acquisition, removal of any contaminated soils, or major utility work.

I-024-015

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

From: 01/07/2010 22:04 #009 P.007

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-025-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-025-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

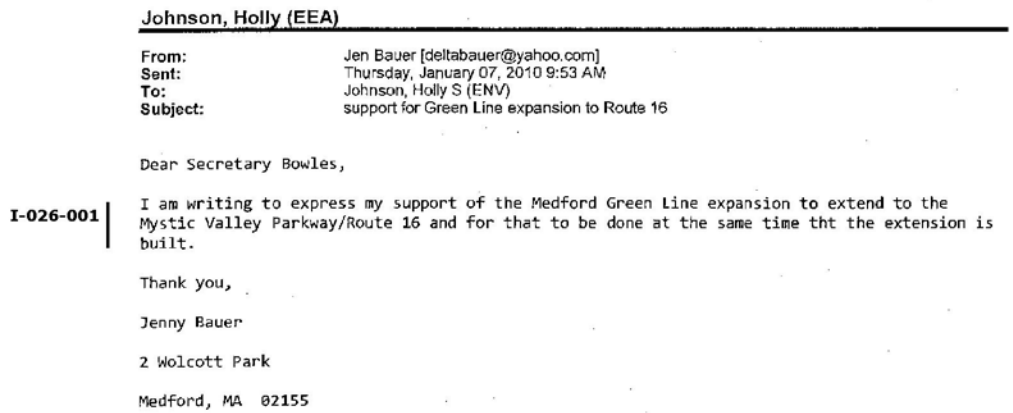
Thank you for hearing my concerns.

Sincerely,

Signature

Edward D. Batista Jr.
Print Name

169 Monsignor O'Brien Hwy Apt 402 Cambridge MA 02141
Address



Johnson, Holly (EEA)

From: Jen Bauer [deltabauer@yahoo.com]
Sent: Thursday, January 07, 2010 9:53 AM
To: Johnson, Holly S (ENV)
Subject: support for Green Line expansion to Route 16

Dear Secretary Bowles,

I-026-001 I am writing to express my support of the Medford Green Line expansion to extend to the Mystic Valley Parkway/Route 16 and for that to be done at the same time tht the extension is built.

Thank you,

Jenny Bauer

2 Wolcott Park

Medford, MA 02155

1

I-026-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: jbay@gis.net
Sent: Thursday, January 07, 2010 10:54 AM
To: Johnson, Holly S (ENV)
Cc: jbay@gis.net; brickbottomgr@earthlink.net
Subject: opposition to DOT maintenance facility at Yard 8

Dear Secretary Bowles:

I-027-001 I am writing to voice my opposition to building the proposed DOT maintenance facility at Yard 8, directly adjacent to the Brickbottom Artists' Building. (EEA# 13886) Brickbottom is a thriving residential community of 220 residents in 155 live/work condominium units. I am the owner of unit #B450 in the Bakery building.

Some of the primary reasons I oppose siting this facility next to Brickbottom are these:

* it will have negative sound and vibration impacts
* it will have an adverse impact on Brickbottom property values
* it will result in a significant loss of future tax revenue for Somerville
* it would place an unfair, disproportionate burden of environmental impact on the quality of life for Brickbottom's 220 residents
* the project's Citizen's Advisory Group was not included in the evaluation of potential sites for the maintenance facility and storage yard.

I-027-002 This violates the Secretary's Certificate for community involvement in the project. (EEEF, Smart Growth/Land Use, p.5)

I-027-003 I would like to encourage the DOT to focus on alternative sites, including Mirror H and Option L. Also, there should be a process in place to address mitigation problems during construction and after the fact. There must be a way for Brickbottom residents to seek redress if specific project goals are not met.

While I am in support of the Green Line extension overall, I believe it is possible to separate the Extension planning and design from the DOT maintenance facility and storage yard because the facility is not part of the mandated 2014 Green Line Extension completion deadline. I urge you to consider Mirror H, Option L, or some other alternative site for the DOT facility and yard.

Sincerely,

John Bay

1

I-027-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-027-002

As described in the DEIR/EA Section 1.5.3, throughout the development of the DEIR/EA regular coordination with the Advisory Group and local municipalities on various aspects of the Project, including siting of the maintenance facility, occurred. During the Summer of 2008, tutorials on the proposed maintenance facility as well as site visits to existing maintenance facilities were conducted for Advisory Group members. Additionally, in December 2009 a public meeting was held on the various maintenance facility sites.

I-027-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. Mitigation measures for the College Avenue and Lechmere Stations are further described in FEIR Chapters 4 and 5, respectively. The mitigation measures required by the Certificate are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. Additionally, the Public Involvment Plan provided in Chapter 6 of the FEIR describes the process that MassDOT will use to obtain community input for mitigation measures.

January 8, 2010

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JAN 8 2010

MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us

Re: Comments on Draft Environmental Impact Report/Environmental Assessment (DEIR/EA), EEA #13886

Dear Secretary Bowles:

I'm a homeowner at 34 Emery Street, Medford, in area known as Medford Hillside. I've lived in this house for over 22 years, and before that rented an apartment a couple of blocks away for more than 4 years, so I've been in this area, which is northwest of and adjacent to Tufts University, for about 27 years.

I was thrilled to learn in 2006 that the Green Line would be extended to my neighborhood, so I would have a better alternative to buses for trips into Boston and back.

Since I attended my first meeting about the Green Line extension, an Environmental Impact Report Public Scoping Session held by the EOT at Somerville High School on October 16, 2006, I have followed the project very closely. I have attended every meeting about the Green Line extension that I was able to find out about, including almost every Green Line Extension Project Advisory Group meeting, neighborhood workshops and meetings held by EOT, every public meeting in Medford City Hall (including meetings of the City Council and the Transportation subcommittee) that had content about the Green Line extension, meetings of the Medford Green Line Neighborhood Alliance, meetings of Move Massachusetts and the Conservation Law Foundation, among others.

I have been an enthusiastic proponent of the Green Line extension going to Mystic Valley Parkway / Route 16, since the earliest suggestion of Route 16 being the terminus for the extension. I worked hard for this outcome, believing it essential to serve the goals of the project, and was very pleased at Secretary Aloisi's February 3, 2009 recommendation that the Green Line be extended to Mystic Valley Parkway/Route 16 as the Preferred Alternative. In that announcement, EOT anticipated "starting construction of the preferred alternative by 2012 and completing construction prior to the required December 31, 2014 opening date".

Medford sorely needs this improvement to its public transit, for all the reasons that some version of the project has been in the works for about 40 years: to countermand the declining air quality caused by

automobile traffic, reduce traffic congestion, serve environmental justice populations that have been disadvantaged by the current limited transportation options, open opportunities for transit-oriented development to help those same populations, and more. With our current consciousness about global warming, measures that decrease our use of fossil fuels are even more crucial than previously thought. Tepid support from Medford public officials should not be interpreted as lack of enthusiasm for this project from the residents of Medford. With only one grass-roots publicity drive, a petition to bring the Green Line to Route 16 has garnered over 2,000 signatures: http://www.petitiononline.com/MGNA16/petition.html.

I recognize that a tremendous amount of work has gone into the DEIR. However, I strongly urge you not to accept the Draft EIR as a Final EIR on the following grounds:

I-028-001

1. **The project as laid out in the DEIR DOES NOT extend Green Line Service to Medford Hillside by December 31, 2014, and therefore DOES NOT meet the legal commitment.** As noted in the December 1, 2006 Certificate of the Secretary of Environmental Affairs on the Expanded Environmental Notification Form, "the extension of the Green Line to Medford Hillside remains a part of the Commonwealth's transit commitments developed through the CNT Project permitting. This commitment was codified in the DEP Transit System Improvement Regulations (310CMR 7.36) in 1991 and is included as an element of the Commonwealth's State Implementation Plan (SIP) for ozone. Revised Transit Regulations are being issued today [December 1, 2006] and include a legal commitment for EOT to extend Green Line Service using light-rail vehicles from Lechmere Station to Medford Hillside and a spur to Union Square before December 31, 2014."

   There are two parts to this deficiency:

   a. **Route 16, the only station that serves Medford Hillside, will not be built by 2014** (or, seemingly, ever). Even though Alternative 2 (to Mystic Valley Parkway/Route 16) is the Preferred Alternative, the DEIR claims that the segment from College Ave. to Route 16 cannot be built within the 2014 timeframe mandated by the State Implementation Plan due to insufficient funding, and speculates that the "funds will be available sometime between 2016 and 2020". It notes that the segment in question "is not envisioned to be constructed within the three-year Massachusetts Environmental Policy Act (MEPA) or National Environmental Policy Act (NEPA) time frame and would, therefore, require reassessment at a future date." (Page 3-40). It is not credible that Mass DOT would go through this same arduous two-year process to build one station. The unavoidable conclusion is that the extension from College Ave. to Mystic Valley Parkway/Route 16 and the terminus station at Route 16 will not be built between 2016 and 2020, but sometime next never.
   b. **The proposed College Ave. station is not in Medford Hillside.** EOT (now MassDOT) has continued to wave away a large amount of public input and evidence on this point. While Medford Hillside may not be specifically defined with consistent boundaries in every available source, there is NO source that puts the intersection of College Ave. and Boston Ave. in Medford Hillside. For voluminous research on this point, which was submitted to EOT in September of 2008, see http://www.box.net/shared/bvqletj5yz .

January 8, 2010

I-028-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Note: A Winthrop Street station, which would clearly be in Medford Hillside, at a location that previously had a rail station named "Medford Hillside", was dropped early in EOT's evaluation process, for reasons that were never adequately explained. As State Representative Carl Sciortino put it in a September 15, 2009 letter to Kate Fichter at EOT: "... the Certificate made clear that a thorough study of the section between College Avenue and Route 16 be completed. And in particular, stops at Winthrop Street, Route 16, and the possibility of combining a College Ave/Winthrop Street station into one. The 2009 Status Report gives no indication of the status of the Winthrop Street station. I have attended every meeting of the Advisory Group, and I have reviewed all of the public comments submitted during this process. I cannot find justification for removal of the Winthrop Street stop, and believe dropping this location without adequate and verifiable justification is unwarranted, and is in violation of the Secretary's Certificate." EOT staff has stated that community opposition was the reason, but there was a large contingent of support for a Winthrop Street station, and why the alleged (and invisible) opposition was given more credibility is still a matter of consternation and great disappointment.

I-028-002

2. **The proposed College Ave. station is not suitable for a terminus, does not provide many of the benefits the project promised, and does not adequately address mitigation.**
   a. **A College Ave. station terminus will *decrease* the quality of life in Medford Hillside – the opposite effect from the stated project goals.** A terminus at College Ave./Boston Ave. *will not* serve Medford Hillside and *will not* provide the benefits of a Route 16 station, but it *will* cause detrimental impacts in air quality and traffic in Medford Hillside, and a lack of mitigation measures for abutters from College Ave. to Winthrop Street. It will draw more traffic and pollution along Boston Ave. from Route 16 to College Ave., from the many thousands of people who live within walking distance of a Route 16 terminus but too far away to walk to College Ave. The extension of the tail tracks beyond the College Ave. station directly impact residences beyond the station location much more than would be the case if Route 16 were the terminus, but these are not eligible for the mitigation measures that would be required if the extension went to Route 16. The intersection of College Ave. and Boston Ave. is one of the worst in Medford, and will only be exacerbated by the addition of a terminus station.

I-028-003

   b. **There is no opportunity for transit-oriented development at College Ave.** As noted in sections 4.2.2.6 and 4.2.2.7, pp. 4-9 to 4-10, the area around the College Ave. station site is almost entirely owned by Tufts University and occupied by Tufts buildings, playing fields, parking lots, etc. There are also some churches and other school buildings and parking lots. What little commercial development fits in the margins, as noted, mostly serves college students. The opportunities for transit-oriented development are slim to none. Along Boston Ave. to Route 16, by contrast, there are already many commercial buildings providing tax revenue to the City of Medford and services to residents other than college students, including two office buildings, a Whole Foods supermarket, a fitness club, and more, and the densely populated residential neighborhoods nearby could benefit greatly by the further development that convenient transportation would bring.
3. **The Mystic Valley Parkway/Route 16 terminus was not properly evaluated to maximize benefits and minimize environmental impacts.** The design put forward by EOT is acknowledged by them to be a "worst-case scenario", a treatment reserved for this station alone in the stations evaluated for

I-028-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-028-003

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

the extension. Probably the most egregious aspect of the design is that it requires taking of two large commercial buildings (at 200 and 222 Boston Ave.) in a city that has an unusual proportion of non-profit entities (i.e., tax-exempt) and protected open space (such as the Mystic River Reservation and the Middlesex Fells Reservation), so feels keenly the loss of such tax revenues. (Medford Green Line Neighborhood Alliance proposed a working meeting with EOT and the property owner (Cummings Properties) in April, 2009 to discuss alternative designs, but after showing initial interest, EOT declined to attend such a meeting and it could not have been meaningful without EOT input.) A private citizen, working on a completely voluntary basis, devoted hundreds of hours to coming up with an alternative that would avoid these takings while following the proper MBTA track specifications, and EOT has acknowledged that it is working on such an alternative itself, but has failed to present it to the public or make it part of the DEIR. The alternative proposed by John Elliott, working with the Medford Green Line Neighborhood Alliance, can be seen at http://medfordgreenline.org/MGNA-EIRA/MGNA_Rt16_Design.pdf. MassDOT should continue analysis of the Route 16 terminus to avoid the taking of these important commercial structures and present it in a Final EIR. Doing so would save at least $50 million in land acquisition and relocation costs, avoid disruption of these businesses that are important to the local tax base and that provide a significant number of jobs, and possibly also avoid sliver takings in residential properties along Piggott Road.

I-028-004

I-028-005

4. **Cost figures that led to dropping the segment from College Ave. to Route 16 need to be re-examined.**
   a. **Medford should not have to sacrifice the major benefit it would get from the extension because of Cambridge's failed deal on Lechmere.** The cost of re-locating the Lechmere station is now borne by the project because a deal with Northpoint developers fell through. Coincidentally, this cost is approximately the same as the cost of extending the Green Line from College Ave. to Route 16.
   b. **The cost of a maintenance facility should be amortized over the entire Green Line, not born solely by the extension budget.** The maintenance facility was originally supposed to be a small support facility, then morphed into a much larger-scale maintenance facility to support more of the Green Line. Costs should be apportioned accordingly.
   c. **Delaying the Route 16 station to a fantasy "Phase II" would, in the extremely unlikely event that Phase II became a reality, add at least $55 million in additional costs to the project.** Reconfiguring College Ave. from a terminus back to an intermediate station, going through the entire approval process for one additional station at Route 16, and adding the disruption and additional construction costs for a second phase introduce unacceptable additional costs and pain to a project that really only makes sense if it is built in one phase, by 2014, as mandated. The Green Line extension project has been in the works for about 40 years. The Beyond Lechmere study investigated bringing the Green Line extension to West Medford, where it would create synergy with the existing commuter rail stop. As stated (ES-3), "The Green Line Extension is urgently needed to improve corridor mobility and livability, particularly in transit-dependent and Environmental Justice communities." Further delays in a project with such widely accepted and obvious benefits are unconscionable.

I-028-004

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues. DEIR/EA Section 5.3 describes the Project's potential acquisitions. MassDOT will evaluate opportunities to minimize the property impacts along the Mystic Valley Parkway/Route 16 segment when this portion is advanced.

I-028-005

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

d. **The project's ability to compete for Federal transportation dollars would be impaired by dropping the College Ave.-to-Route-16 segment.** Reducing all of the benefits of the project by ending the extension at College Ave. makes the project significantly less competitive in the areas of air-quality-improvement, ridership, traffic reduction, and service to environmental justice communities, making it more likely that more of the project's costs will need to be borne by the citizens of the Commonwealth.

Throughout this project, I have voiced these points and related concerns in verbal comments in meetings, in emails to staff at EOT and to former Secretary Aloisi, and in letters submitted as public comments at various stages in the project, and I would be happy to make any of this prior correspondence available on request. I will attach only two examples: a public comment on the annual update and status report for transit projects required by 310 CMR 7.36 (2) (f) through (j), as submitted by The Executive Office of Transportation and Construction to MassDEP on July 1, 2008, and an 8/28/08 letter from MGNA to Steve Woelfel at EOT to which I am a signatory.

I-028-006

The opportunity to extend the Green Line extension to Mystic Valley Parkway / Route 16 is one we cannot afford to delay or curtail. Forty years of analysis, planning, and discussion have gone into vetting this project. MassDOT should be required to continue analysis and design modifications and submit a Final EIR that addresses the many outstanding issues in the design and funding of the Green Line extension. It should fix the design of the Route 16 terminus to make unnecessary the commercial land takings at 200 and 222 Boston Ave., vigorously pursue Federal funding for the Preferred Alternative, find other funding for the Lechmere station relocation, and build the Preferred Alternative to Mystic Valley Parkway / Route 16 by the mandated deadline of December 31, 2014. In short, it should go the extra mile, literally, to fulfill a long-standing transit commitment of the Commonwealth that is vital to the health and well-being of thousands of residents.

Thank you for your attention to these comments.

Sincerely,

Elisabeth Bayle
34 Emery St.
Medford, MA 02155

cc: State Representative Carl Sciortino

Attachments: Public comment on the annual update and status report for transit projects required by 310 CMR 7.36 (2) (f) through (j), as submitted by The Executive Office of Transportation and Construction to MassDEP on July 1, 2008

8/28/08 letter from MGNA to Steve Woelfel at EOT

I-028-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA. As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (MassDEP DEIR/EA comment letter, January 8, 2010).

Attachment to Bayle comment on DEIR

September 10, 2008

Kate Fichter
Executive Office of Transportation
Office of Transportation Planning
Room 4150, Ten Park Plaza
Boston, MA 02116
Katherine.Fichter@state.ma.us

Re: Public comment on the annual update and status report for transit projects required by 310 CMR 7.36 (2) (f) through (j), as submitted by The Executive Office of Transportation and Construction to MassDEP on July 1, 2008.

Dear Ms. Fichter:

I am a 21-year resident of an area of Medford known as Medford Hillside, near the intersection of Winthrop Street and Boston Avenue, and I have been attending as many Green Line meetings as I could get to since the first one I found out about, the Environmental Impact Report Public Scoping Session at McGlynn School in Medford on November 15, 2006.

I have read the Green Line portion of the EOT's annual report (pages 15-19) and respectfully submit the following comments:

1. On Page 15 of the report, there is a list of currently proposed station locations, in which "College Ave./Medford Hillside" is the first item. "College Ave./Medford Hillside" is not *one* possible station site, as the report suggests; it is *two separate* sites:

   a.) College Ave./Boston Ave.
   b.) Winthrop St./Medford Hillside

   The first, College Ave./Boston Ave., is commonly considered to be on the border of Medford Hillside, though many sources place it outside. The second, Winthrop St./Medford Hillside, is clearly within Medford Hillside. You can stand at the intersection of Winthrop Street and Boston Avenue and look at Hillside Hardware, Hillside Liquors, and Hillside Cleaners for a sense of the place, and/or you can consult a raft of contemporary and historical maps and documents for verification. There are plenty of maps that show the previously existing Medford Hillside Station, which was at the intersection of Winthrop Street and Boston Avenue behind the current location of the Danish Pastry House.

   A Green Line Extension terminus at College Ave. **would not** serve the majority of Medford Hillside, which is a densely populated area with a lot of residents who do not own cars and who could benefit enormously from frequent light rail transit service.

2. The EOT's *Green Line Extension Project* newsletter, dated Winter 2008, also lists Winthrop Street and Mystic Valley Parkway as locations for which stations have been proposed. The station workshop EOT held on Thursday, January 31, 2008, focused on "stations proposed for the College Avenue and Winthrop Street neighborhoods" (and there was a separate station workshop on February 6, 2008, focusing on the Mystic Valley Parkway station). We were lead to believe that EOT was studying a College Ave. station, a Winthrop Street station, and an alternative of a combined station that would be located approximately mid-way between these two, in the vicinity of the end of Brookings Street.

   We were told that optimal station spacing was approximately one-half mile, which was a consideration in where to place the stations. Too close, and trains would have to stop too often, slowing the ride; too far apart and too many residents would not be served. College Ave., Winthrop St., and Rte. 16 seem to fit into an almost optimal spacing.

   However, the Winthrop St. station has been dropped without notice or explanation or discussion, and the alternative combined station was dropped supposedly due to neighborhood opposition, leaving us now with College Ave., and a faint possibility of Rte. 16, as station locations. These two are, at best, at the extremities of Medford Hillside, an area the project is mandated to serve, and are one mile apart. There was some mention by the project team that the optimal station spacing is now changed, but this, along with the mysterious disappearance of the Winthrop St. station from the project plans, seems retrofitted to rationalize a decision reached behind the scenes by unknown powers not accountable to the public.

   There should be a much more public and thorough accounting of why there is no longer study of a station at Winthrop St. and why a handful of abutters at Brookings St. could not have been given sufficient mitigation to make a combined station a viable alternative. Large numbers of residents of Medford Hillside will not be served if there are no stations between College Ave. and Rte. 16, and many generations to come will forfeit the benefit of this type of public transportation. This population will probably still have to be served by bus routes, clogging the streets of the Hillside and continuing the pollution and traffic snags caused by buses having to maneuver through narrow streets and intersections, stopping all traffic every time they stop because there is not enough room for cars to pass buses along these routes.

3. Discussion of a Mystic Valley Parkway/Rte. 16 station has devolved so that this proposed station seems doomed to fail. The station now seems burdened with encumbrances that are not being contemplated for other stations along the Extension: a much longer platform, a requirement for 5 tracks, an "Alewife-style" parking facility, and expected taking of a large amount of commercial real estate at and around 200 and 222 Boston Ave. The project was not supposed to include parking garages of any type, and there is huge opposition to this in Medford because of the traffic congestion already experienced along Boston Ave. from College Ave. to Rte. 16 – congestion this project is supposed to alleviate, not worsen. Land-takings of large commercial buildings that contribute to the tax base is obviously undesirable in a city that has so much land devoted to tax-

exempt enterprises such as Tufts University and many churches, and protected open space such as the Mystic River Reservation and the Middlesex Fells Reservation. We had been lead to believe that any land-taking for this project would be minimal – at most, small slices where the rail right of way was not quite wide enough; the only significant building taking that was mentioned in the meetings was that of the U-Haul at Rte. 16.

I strongly request that EOT consider alternative designs and ways to make a Rte. 16 station work without these controversial elements. If there is no Rte. 16 station, I don't see how the project can meet the ridership levels and air quality improvements that have been set for it, and Medford will forfeit not only the transit alternatives that we so sorely need, but also the associated transit-oriented development that could enhance the city's tax base and contribute to a better quality of life.

If Rte. 16 is not a viable station location, EOT needs to explain why publicly, and needs to consider other strategies that were discussed earlier in the project, such as a terminus at North Street.

4. While a good start was made on an open process with the station workshops in early 2008, there have been notable lapses in communication since Spring 2008, such as the following:

    - Promised follow-ups on the station workshops that were to take place in June did not take place, with no explanation, and none are scheduled.
    - The promise to have an MBTA representative come to one of the Project Advisory Meetings so we could ask questions about MBTA station requirements, plans, and mitigation measures has never been fulfilled and is not scheduled.
    - The July meeting that was to have reported on ridership studies was cancelled and no ridership estimates have been provided.
    - The August meeting that was to have introduced conceptual plans and cost estimates did not cover either topic – it covered general methods for assessing noise and vibration and air quality (not any specific remedies).
    - The September meeting that was to have presented environmental analysis has been cancelled.

    EOT is perhaps painfully aware that many Medford citizens are extremely anxious about the subject of land-takings, the ramifications of moving the commuter rail closer to many homes, and possible exacerbation of an already difficult traffic and parking environment. The lack of concrete answers along with many unexplained twists and turns in the process have caused some to believe that this project is being decided with backroom dealing rather than a process the public has any access to or effect upon. I sincerely hope that is not true and hope EOT will proceed in a more open, deliberative manner that will restore public confidence that legitimate questions will be answered and legitimate needs are being taking into account in planning the best possible project for us and for future generations.

The Green Line Extension, with well-designed and well-spaced stations, integrated with other transit options and a community path, has the potential to not only fulfill the air quality and environmental justice requirements that are its mandate, but to provide greater opportunities and a better quality of life for tens of thousands of citizens for many generations. It's too important a project to be cut short at College Ave.

Sincerely,

Elisabeth Bayle
34 Emery St.
Medford, MA

Attachment to Bayle Comment on DEIR

MGNA
Medford Green Line Neighborhood Alliance
www.medfordgreenline.org
info@medfordgreenline.org

August 28, 2008

Mr. Steve Woelfel
Manager, Statewide Transit Planning
Project Manager, Green Line Extension
Executive Office of Transportation
10 Park Place, Room 4150
Boston, MA 02116

Dear Steve:

We write today to follow up on our meeting with you and your staff at EOT, and representatives of VHB, at the EOT offices on Monday, August 18th, 2008. First, we want to thank the EOT for agreeing to the meeting and having a frank exchange on the status of the Green Line Extension to Somerville and Medford.

As you know, the Medford Green Line Neighborhood Alliance (MGNA) has strongly supported the Green Line project since its inception following the Beyond Lechmere Study completion in August 2004. MGNA has presented several design and demographic studies to support our position that, among the terminus locations being considered, the optimal place to end the Green Line is at Route 16, which provides the greatest transportation and environmental benefits to the largest number of people.

However, we were disappointed by several aspects of discussion at the August 18th meeting. The general impression we got after the meeting is that the Route 16 station is not being seriously investigated, though the EENF certificate required it to be for this next phase of design. All of the markers – ridership, physical configuration, etc. - were presented in what we view as an extremely negative light. We neither saw nor heard any new ideas about how to make the Route 16 station work. We saw no design evolution of any kind from the original Route 16 concept drawing produced in June showing significant land takings. We believe that the inclusion of a parking garage in the design and the major takings being considered are nothing less than "poison pills" ultimately intended to kill the Route 16 terminus altogether.

There appears to be a double-standard being applied to the two possible terminus locations on the table now – Route 16 and College Ave. The latest Route 16 drawings show a 450-foot platform, while College Ave. shows only a 225-foot standard platform as a terminus. But even more glaring for its inconsistency is the inclusion of a 300-car parking garage at Route 16 where none is being studied at College Ave. We asked about this at the EOT meeting and were told that the garage may be needed for ridership. This appears to directly contradict the EENF Certificate, which clearly states on page 10, "Because *parking will not be provided*, the ability to provide good pedestrian and bicycle access will be a critical factor in station locations and designs." For the record, MGNA strongly opposes any Alewife-style parking structure at Route 16 (or at College Ave., for that matter), understanding from demographic study results that the density of the surrounding Medford, Somerville and Arlington neighborhoods (and great connectivity with existing buses and planned Mystic River walking/bike trails) will provide the ridership needed to justify the station terminus at Route 16. In addition, a parking garage would attract more cars to our already overcrowded streets and the DCR's Mystic Valley Parkway, directly subverting one of the major aims of the Green Line project: to reduce traffic congestion and driving.

We would like a written explanation of this double standard: Why has the Route 16 station not been advanced in design? Why is a garage being studied at Route 16 and not at College Ave.? How can a garage be needed at Route 16 for ridership and not at College Ave., which is 1 mile from Route 16 and would presumably have less overall ridership than if the Green Line Extension ended at Route 16? Why are different design standards being applied to each site?

A few other issues arose at the meeting that must be addressed. The EOT was instructed by the Secretary's EENF Certificate to study College Ave., Winthrop Street, a combined station in-between College Ave. and Winthrop, and a terminus at Route 16. The combined station in between College Ave. and Winthrop has been dropped after what we were told was "community opposition"; however, there has been no substantial community opposition to the Winthrop Street station, as noted in Representative Carl Sciortino's August 14th letter to the EOT. Once the combined station was dropped, we believe that the study should have reverted to the original configuration of College Ave., Winthrop St. and Route 16. There is no documented reason to exclude the Winthrop Street station and this portion of the study should be re-opened.

Finally, we were disturbed to learn that the EOT is attempting to redefine the Medford Hillside as the area between College Ave. and Winthrop Street. This is categorically and demonstrably false (see the attached maps). Most modern as well as historic maps show Winthrop Street as the CENTER of the Medford Hillside, the "Main Street" of the neighborhood, which stretches from the Somerville line to the Mystic River. In fact, in terms of population and geographic area, most of the Medford Hillside neighborhood lies north of Winthrop Street, not south. This apparently unilateral attempt to redraw or relabel the map of the Hillside, and redefine terminology that has been in use for a century, appears to be another example of an attempt to end the Green Line Extension at Tufts/College Ave. without doing a thorough and detailed study of the locations called for in the EENF Certificate.

Let us be clear: A Green Line Extension ending at College Ave. would:

- Shortchange the citizens of Medford and become a Somerville-only project, barely entering Medford (the College Ave. site is 200 feet from the Medford-Somerville line)
- Deny the 10,000 residents of Medford, West Somerville and East Arlington who live within a ten minute/half-mile radius of Route 16 direct access to the Green Line
- Neglect five Environmental Justice neighborhoods in West Medford, Somerville and East Arlington that the Green Line Extension project is intended to serve
- Underserve the majority of the Medford Hillside neighborhood, which lies north of Winthrop Street – the very neighborhood it is required to serve
- Forfeit a historic opportunity to improve the transportation infrastructure, environment and quality of life for literally tens of thousands of Medford, Somerville and Arlington residents

For all of these reasons, we strongly urge the EOT to:

- Eliminate the parking garage from the Route 16 station design
- Redouble the effort to make the Route 16 station work as a terminus without a garage
- Reinstate the Winthrop Street station
- Recognize the historic geographic boundaries of the Medford Hillside and design accordingly

Despite a few vocal opponents in Medford, we believe that there is strong community support in Medford, Somerville and Arlington for a Route 16 terminus. That is why we organized a petition in favor of Route 16 and so far have accumulated over 2,100 signatures, with more added every day. You can see our petition and demographic analysis on our website at www.medfordgreenline.org.

We would appreciate a prompt written response to the issues raised in this letter.

Sincerely,

The Medford Green Line Neighborhood Alliance

as represented at the August 18 meeting by:

Doug Carr
John Roland Elliot
Ken Krause

and additional MGNA supporters:

Elisabeth Bayle
Melissa Bennett
Robert Feigin
Jared Ingersoll
Jim Kiely

CC: Bernard Cohen, Secretary of Transportation
Wendy Stern, Undersecretary of Transportation
Ian Bowles, Secretary of Environmental Affairs
Kate Fichter, EOT
Conservation Law Foundation
State Senator Pat Jehlen
State Representative Carl Sciortino
State Representative Sean Garballey
Kristine Wickham-Zimmerman, VHB
Mike McArdle, VHB

Encl: A selection of maps identifying the Hillside neighborhood

Johnson, Holly (EEA)

From: Laurinda Bedingfield [dogzzarecool@yahoo.com]
Sent: Thursday, January 07, 2010 12:51 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886 Green Line Draft EIR

Dear Ms. Johnson,

Below are my comments on The Green Line Draft EIR, EEA#13886.

I am a life long resident of Somerville, specifically the Union Square area and former Commissioner of The Massachusetts Department. I am writing to support the Green Line extension process and urge the state to expedite this important economic development project. Extending the line will certainly benefit residents and commuters of the area but will also provide a much needed link to the greater Boston multimodal system. Specifically, I would hope that station design incorporate bicycle and zip car facilities as well as links to the existing community path and extension of the path through Somerville.

I-029-001

Sincerely,

Laurinda T. Bedingfield
61 Putnam Street
Somerville, MA
02143

1

I-029-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Christopher Beland [beland@alum.mit.edu]
Sent: Friday, January 08, 2010 8:14 PM
To: Johnson, Holly S (ENV)
Subject: Comments on Somerville/Medford MBTA Green Line Extension (EEA #13886)

Secretary Bowles:

I strongly support the Green Line extension to Somerville and Medford, which is sorely needed to reduce regional air pollution, greenhouse gas emissions, and traffic congestion. Route 16 in the area near the proposed extension experiences extreme congestion at peak travel times, and traffic in this area contributes to high congestion to the west at the Route 2/3/16 interchange near Alewife Station, and to the east on I-93. The proposed Route 16 Station would be thus be an extremely beneficial capstone to an extension which is already connecting many densely developed neighborhoods with commuter destinations such as Tufts and downtown Boston. I-030-001

The inclusion of a station at Union Square is an excellent feature, given that this major commercial area is off the "mental map" of transit in Somerville due to lack of a rail station. The preferred alternative on the Commuter Rail right-of-way presents an excellent opportunity to redevelop this area and create a continuous pedestrian-friendly zone from Union Square in Somerville to Inman Square in Cambridge.

Preservation of the ability for a future extension to Porter Square is important, as that would provide a much faster rapid transit connection to Union Square, Lechmere, and North Station from the northern Red Line corridor. I-030-002

Several relatively inexpensive improvements to pedestrian, bicycle, and bus access should be made to maximize ridership and thus the positive environmental impact of this project, to get the most from the major investments being made: I-030-003

* A better connection is needed from Gilman Square Station to the area in the direction of Montrose Street and the major bus routes on Highland Ave. A second entrance connecting to School Street, or a connection to the Somerville Community Path from School Street would prevent a long walk around the block.

* The proposed connection between the Somerville Community Path and Lowell Street Station appears to dump pedestrian and bike traffic on a sidewalk on the opposite side of the street from the station entrance, at a point with no crosswalk. A more direct connection would be preferred, putting the path entrance on the same side of the street as the station entrance. If this is not feasible, a well-marked crosswalk should be added to make the direct crossing (which is what people will take, regardless of the presence of a crosswalk) safe.

* The proposed connection between Brickbottom Station and westbound buses on Washington Street is circuitous. The Somerville Community Path could be used to provide a grade-separated crossing of Washington Street which also shortens the walking path to the westbound stop. The additional connection would also improve path access for non-transit users.

* The pedestrian connection from College Ave Station to Burget Ave currently involves either a very long route via George Street, or a poorly maintained pedestrian-only route through Tufts property on College Ave. If the Wrong-headed neighbor objections to a station entrance in this direction prevail, many pedestrians would use the shortcut through Tufts property to access the Green Line station. The project should upgrade this connection to be ADA compliant (it currently involves crumbling concrete stairs) and to separate pedestrian from vehicle traffic more safely (given the route passes through a driveway with limited visibility around corners). In this scenario, a minimal second entrance at the north end of the platform

1

I-030-001

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-030-002

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-030-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project, including identifying access issues for each station.

I-030-003 connecting to Boston Ave only would reduce walking distance from that direction, provide a better bus connection at Boston Ave, and attract more riders as a result.

* The bus stops on Broadway should be moved to be directly in front of or on the same block as Ball Square Station, instead of on the next block. If reconstructed, the bridge carrying Broadway over the tracks at Ball Square should be widened to accommodate sidewalk bus shelters and bike lanes.

I-030-004 The extension of the Somerville Community Path greatly enhances pedestrian and bicycle access to many of the proposed stations, and will improve ridership. It should be considered an integral part of the environmental remediation this project provides, not an optional add-on to be built as a separate project at some uncertain point in the future.
It would also be inefficient to construct it later, given the major disruptions to the right-of-way that will occur during the construction of the Green Line extension. Given the uncertain future of the Urban Ring project, the bridge necessary to carry the Somerville Community Path from Inner Belt Road toward Lechmere is a vital link which must be included in the Green Line extension project.

I-030-005 The storage yard attached to the Yard 8 option for the maintenance facility would stretch all the way from the Brickbottom Artist Colony to Brickbottom Station. This would prevent future Brickbottom redevelopment from connecting well with the neighborhood on the other side of the tracks, which already includes commercial and residential areas along Washington Street. The yard should be built in a less obtrusive place, against the existing long-term transportation infrastructure in this area, such as the Commuter Rail Maintenance Facility or I-93. From an environmental perspective, it would be beneficial to reduce the size of the huge parking lots in the Inner Belt area through takings to support Option L. Local workers should instead be encouraged to use the new Brickbottom Station for Inner Belt access.

I-030-006 A track-wheel lubrication solution must be designed and implemented to reduce "wheel squeal" in time for operation of the extension. Noise on Green Line segments elsewhere in the system (such as the curves near Park Street, Boylston, and Government Center Stations) is actually severe enough to cause pain in human ears. The MBTA has been studying this problem, but the urgently needed system-wide solution has been slow in coming. Slow progress in this area should not be allowed to result in higher-than-necessary noise levels in the extension corridor.

I-030-007 An agreement should be constructed that clearly defines maintenance responsibilities for the Somerville Community Path extension. A dispute over financial responsibility between the City of Somerville and the MBTA is currently delaying repairs to retaining walls and drainage on the existing path near Davis Square. The environmental and transportation benefits the path provides are lessened when it is not properly maintained, and simply providing clearer language will avoid needlessly expensive intergovernmental disputes.

Thanks for reading.

Christopher Beland
38 Jay Street #1
Somerville, MA 02144

I-030-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-030-005

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

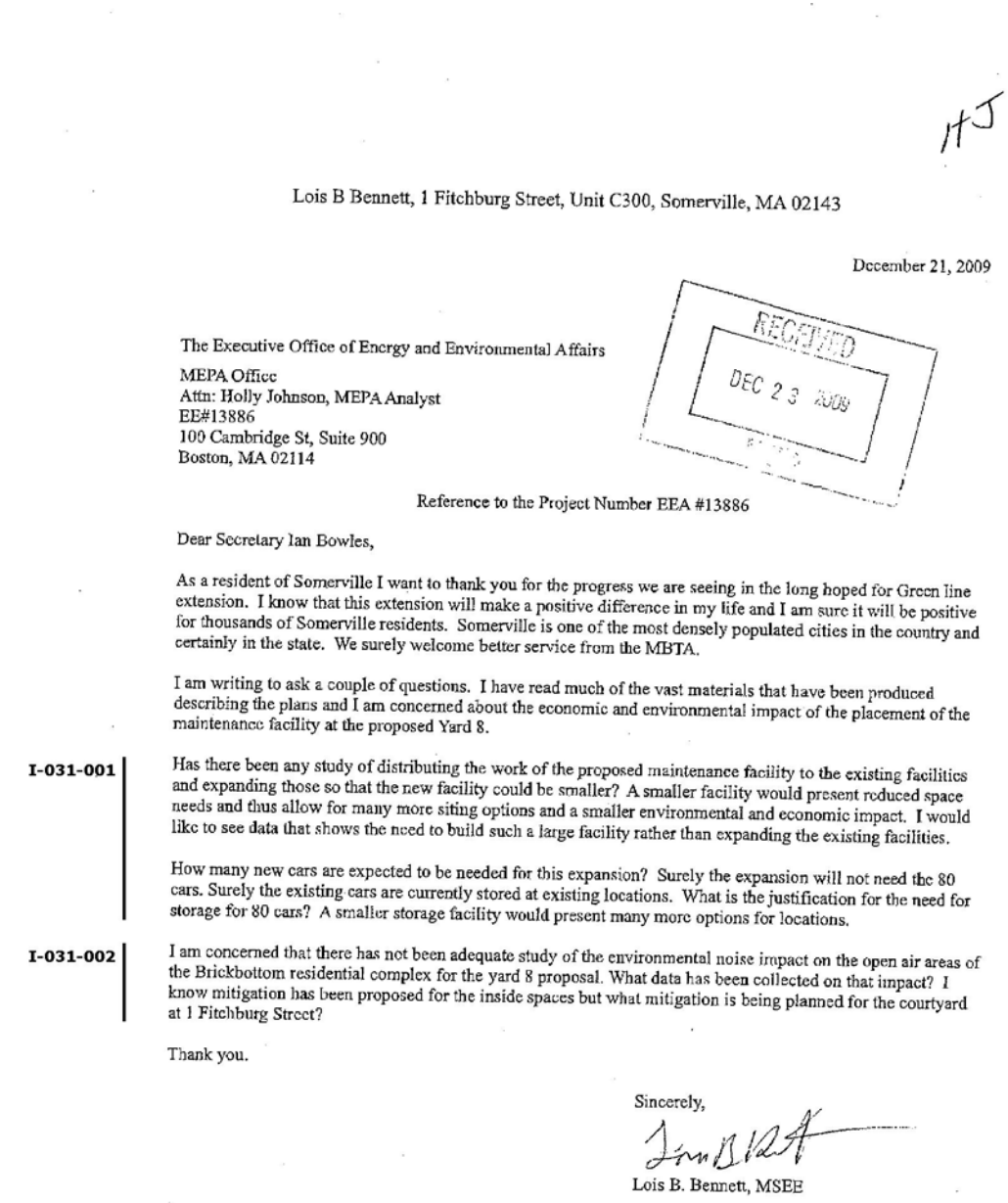
I-030-006

The potential retrofit of Green Line cars with vehicle skirts including acoustical absorption behind the skirt and underneath the car may reduce noise levels from Green Line cars. However, the project corridor is generally dominated by noise from existing commuter trains and such a mitigation measure would not be effective in reducing the total noise generated by both noise sources. Noise barriers proposed for the Project would be more effective in reducing the noise from both Green Line and commuter trains.

I-030-007

As the Community Path project advances into preliminary and final design, maintenance responsibilities will be identified and the MBTA and the City of Somerville will coordinate on the various maintenance and design issues.

HJ



Lois B Bennett, 1 Fitchburg Street, Unit C300, Somerville, MA 02143

December 21, 2009

RECEIVED
DEC 23 2009

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

Reference to the Project Number EEA #13886

Dear Secretary Ian Bowles,

As a resident of Somerville I want to thank you for the progress we are seeing in the long hoped for Green line extension. I know that this extension will make a positive difference in my life and I am sure it will be positive for thousands of Somerville residents. Somerville is one of the most densely populated cities in the country and certainly in the state. We surely welcome better service from the MBTA.

I am writing to ask a couple of questions. I have read much of the vast materials that have been produced describing the plans and I am concerned about the economic and environmental impact of the placement of the maintenance facility at the proposed Yard 8.

I-031-001 Has there been any study of distributing the work of the proposed maintenance facility to the existing facilities and expanding those so that the new facility could be smaller? A smaller facility would present reduced space needs and thus allow for many more siting options and a smaller environmental and economic impact. I would like to see data that shows the need to build such a large facility rather than expanding the existing facilities.

How many new cars are expected to be needed for this expansion? Surely the expansion will not need the 80 cars. Surely the existing cars are currently stored at existing locations. What is the justification for the need for storage for 80 cars? A smaller storage facility would present many more options for locations.

I-031-002 I am concerned that there has not been adequate study of the environmental noise impact on the open air areas of the Brickbottom residential complex for the yard 8 proposal. What data has been collected on that impact? I know mitigation has been proposed for the inside spaces but what mitigation is being planned for the courtyard at 1 Fitchburg Street?

Thank you.

Sincerely,

Lois B. Bennett, MSEE

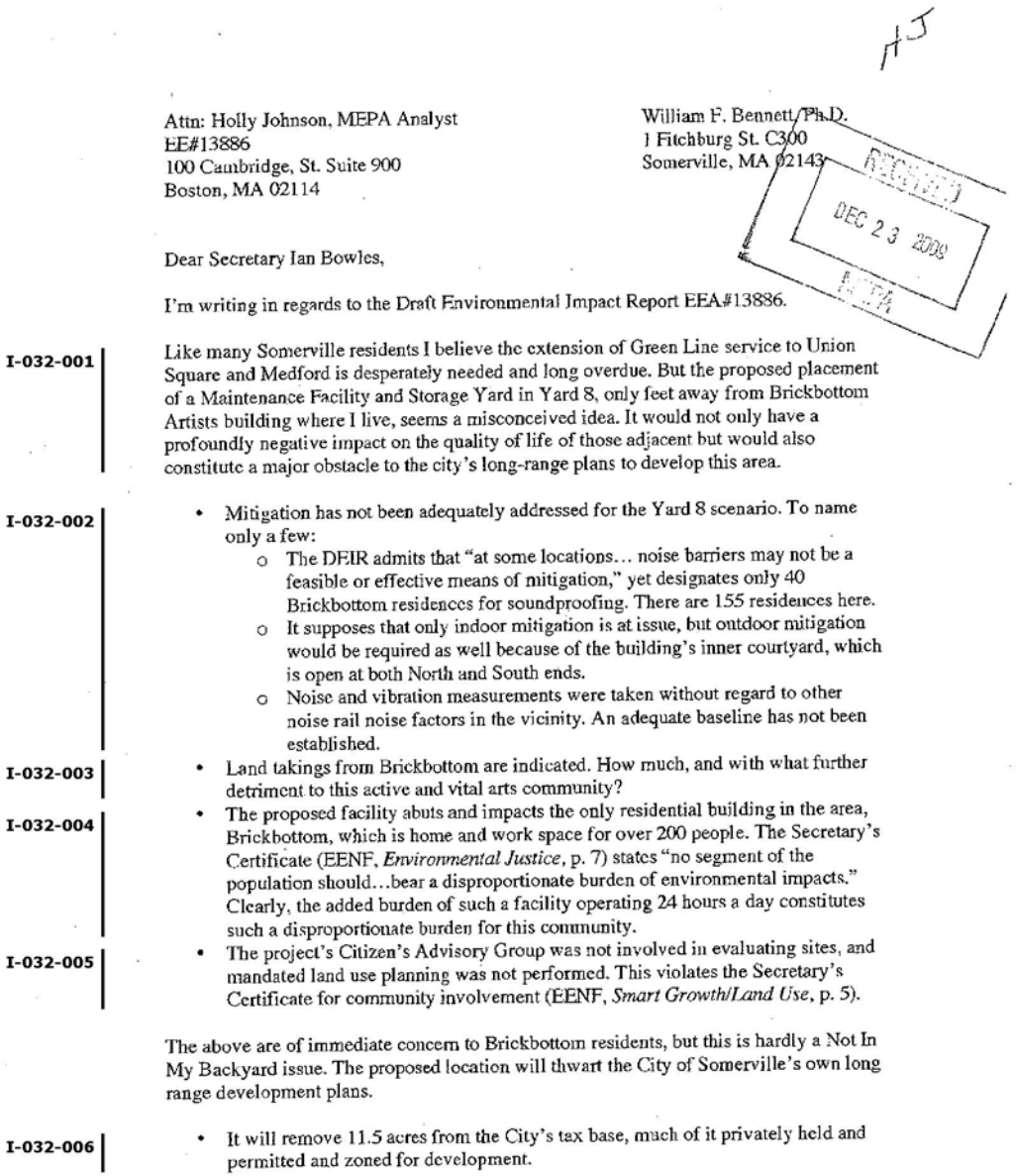
I-031-001

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-031-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge, St. Suite 900
Boston, MA 02114

William F. Bennett, Ph.D.
1 Fitchburg St. C300
Somerville, MA 02143

RECEIVED
DEC 23 2009
MEPA

Dear Secretary Ian Bowles,

I'm writing in regards to the Draft Environmental Impact Report EEA#13886.

I-032-001 Like many Somerville residents I believe the extension of Green Line service to Union Square and Medford is desperately needed and long overdue. But the proposed placement of a Maintenance Facility and Storage Yard in Yard 8, only feet away from Brickbottom Artists building where I live, seems a misconceived idea. It would not only have a profoundly negative impact on the quality of life of those adjacent but would also constitute a major obstacle to the city's long-range plans to develop this area.

I-032-002
- Mitigation has not been adequately addressed for the Yard 8 scenario. To name only a few:
  - The DEIR admits that "at some locations… noise barriers may not be a feasible or effective means of mitigation," yet designates only 40 Brickbottom residences for soundproofing. There are 155 residences here.
  - It supposes that only indoor mitigation is at issue, but outdoor mitigation would be required as well because of the building's inner courtyard, which is open at both North and South ends.
  - Noise and vibration measurements were taken without regard to other noise rail noise factors in the vicinity. An adequate baseline has not been established.

I-032-003
- Land takings from Brickbottom are indicated. How much, and with what further detriment to this active and vital arts community?

I-032-004
- The proposed facility abuts and impacts the only residential building in the area, Brickbottom, which is home and work space for over 200 people. The Secretary's Certificate (EENF, *Environmental Justice*, p. 7) states "no segment of the population should…bear a disproportionate burden of environmental impacts." Clearly, the added burden of such a facility operating 24 hours a day constitutes such a disproportionate burden for this community.

I-032-005
- The project's Citizen's Advisory Group was not involved in evaluating sites, and mandated land use planning was not performed. This violates the Secretary's Certificate for community involvement (EENF, *Smart Growth/Land Use*, p. 5).

The above are of immediate concern to Brickbottom residents, but this is hardly a Not In My Backyard issue. The proposed location will thwart the City of Somerville's own long range development plans.

I-032-006
- It will remove 11.5 acres from the City's tax base, much of it privately held and permitted and zoned for development.

I-032-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-032-002

Please see response to Comment I-032-001.

I-032-003

Please see response to Comment I-032-001.

I-032-004

Please see response to Comment I-032-001.

I-032-005

As described in the DEIR/EA Section 1.5.3, throughout the development of the DEIR/EA regular coordination with the Advisory Group and local municipalities on various aspects of the Project, including siting of the maintenance facility, occurred. During the Summer of 2008, tutorials on the proposed maintenance facility as well as site visits to existing maintenance facilities were conducted for Advisory Group members. Additionally, in December 2009 a public meeting was held on the various maintenance facility sites.

I-032-006

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further

I-032-006

- It will place a permanent barrier between Inner Belt and the Brickbottom area, creating a major obstacle to future economic development.

What seems most infuriating about all this is that there is a serviceable alternative in the "Mirror H" location. The MassDOT representatives have indicated, with few if any specifics, that the latter location is "not optimal" for them. But clearly Yard 8 is a lot worse than "not optimal" for Brickbottom residents, or for the City of Somerville, and its impact will last for generations. At the very least, a greater degree of citizen involvement in this whole process is clearly called for. I join my neighbors and my city in requesting that a Citizen Advisory Committee be established to oversee the project and ensure that the community has a voice in the process, so that the mere convenience of MassDOT does not override the quality of life of a whole community and the long range development goals of an entire city.

I-032-007

Sincerely,

William F. Bennett

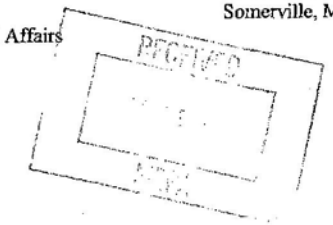
consideration and Option L is identified as the preferred maintenance facility site. The acquistions described for the Yard 8 site do not apply to the Option L site.

I-032-007

Please see response to Comment I-032-005.

12/21/09
1 Fitchburg St. #B553
Somerville, MA 02143

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114



Dear Secretary Bowles,

My name is Dan Berman and I am a resident of the Brickbottom Community located in Somerville. I've lived in Brickbottom since May of 2009. While I haven't lived here for a long time, I still find it important to express my concerns about the Green Line Extension Project. After looking through the Draft Environmental Impact Report (DEIR) and listening to other residents, it has come to my attention that the Yard 8 Maintenance Facility will negatively impact the quality of life for me and the other 219 residents of Brickbottom.

In general, I am a big fan of extending the Green Line beyond the Lechmere stop. When I chose to purchase a condominium in Brickbottom, I was excited to here that the city was planning on building an extension out towards Davis Square. Since I would be living on the opposite side of Somerville, I thought it was a great idea to create a more convenient commute than having to take a bus to Harvard Square and then switch to head towards Davis Square. Even better was hearing that one of the stops would be very close to Brickbottom.

I-033-001

However, when I heard that the Yard 8 Maintenance Facility (operating 24 hours a day with heavy machinery and materials moving in and out constantly) would be built across the rail from my building, I was very disappointed. Quality of life in Brickbottom would become a serious problem. As is my understanding, the DEIR mentions other options in place of Yard 8 that would have no impact on residents of Brickbottom or any other citizens of Somerville or Cambridge. Included in these alternatives are the proposed "Mirror Scheme H" and "Option L." These locations would help keep life acceptable for me and my neighbors. Why would the city willingly build a maintenance facility next to a residence when they have clear options that affect no one?

I-033-002

In addition, by keeping the Yard 8 site clear of a maintenance facility, it leaves valuable land in Somerville available for future businesses or residents to occupy. These precious 11 acres could be used to help spur the economy in the area and increase quality of life for all residents of Somerville, not just us living at Brickbottom.

Thank you for taking the time to read these brief reflections. Others may have more eloquent words to say, but it comes from the heart when I tell you that construction of Yard 8 will severely impact me and my neighbors in a negative way. I hope you take the time to consider how Mirror Scheme H and Option L can help make our lives just a little easier during the transition to having a wonderful subway extension in our community.

Sincerely,

I-033-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-033-002

Please see response to Comment I-033-001.

I-034-001

Johnson, Holly (EEA)

From: Fred Berman [fredlori@rcn.com]
Sent: Friday, January 08, 2010 2:52 PM
To: Johnson, Holly S (ENV)
Cc: Fred Berman
Subject: RE: Green Line Extension Draft EIR (EEA #13886)
Attachments: Green Line Extension DEIR - EEA-13886.pdf

(the following testimony is also attached as a pdf)

==========

January 8, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson
100 Cambridge Street, Suite 900
Boston , MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,

We are writing to express our strong support for the extension of the Green Line to Somerville and Medford and for the extension of the largely coterminous Somerville Community Path to Lechmere.

While many details remain to be worked out, and while we believe there are significant deficiencies in the existing proposal, **we believe that the project should be allowed to move forward to the next (engineering) phase**.

The **as-yet unresolved issues** -- for example, the location/design of the maintenance facility, the location and design of the terminus at Route 16, design considerations that facilitate future extension from Union Square to Porter Square along the Fitchburg Line, etc. -- **should be dealt with via Supplemental EIRs or Addenda to the EIR adopted pursuant to the current MEPA process**.

I-034-002

Given the many design-related issues remaining (e.g., at each station, in conjunction with the siting of the maintenance yard, etc.), and the need to ensure the effective integration of land use, economic, traffic, access, environmental, and aesthetic considerations, **we are asking you to prescribe an ongoing public process, including a representative Citizen Advisory Council, to ensure that our community has input into upcoming decisions**.

==========

We are writing as members and strong supporters of **Somerville STEP** and endorse their recommendations http://www.somervillestep.org/2009/11/steps_speaking.html.

We have participated in the **Community Corridor Planning** process led by STEP, Groundworks Somerville, and Somerville Community Corp., and endorse their **Core Principles** (see http://tinyurl.com/ye7ydea).

I-034-003

And we are avid bicyclists and walkers and support the recommendations of the **Friends of the Community Path** for an **integrated and simultaneous design and construction of the Path alongside the Green Line extension**. http://greenlineextension.info/resources/Friends+CommPath+Ltr+to+EOEA+on+GreenLine+DEIR.pdf

Not only would simultaneous construction of the Community Path and Green Line Extension be more cost effective than treating the two efforts as separate projects, it would also be more consistent with the **Federal Transit Administration's Proposed Policy Statement on the Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law** (http://edocket.access.gpo.gov/2009/E9-27240.htm): "For purposes of determining whether a pedestrian or bicycle improvement has a physical or functional relationship to public transportation, regardless of whether

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I-034-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-034-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-034-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-034-003 it is funded as a capital project or public transportation enhancement, all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation." The Red Line extension and Orange Line re-build represent successful precedents for simultaneous construction of a rail line and bike/foot path.

==========

We appreciate the extensive public process that has allowed Cambridge, Somerville, and Medford residents to help shape planning for the Green Line Extension, appreciate the DOT's commitment to a Route 16 terminus as reflected in the DEIR. **We strongly support inclusion of the extension to the Route 16 terminus as part of Phase 1**, given the uncertainty attendant to future phases.

We deeply appreciate MassDOT's sensitivity to the concerns of residents, businesses, and City officials who argued strongly against a Yard 8 maintenance facility. Although Yard 8 has not been officially withdrawn as an option, and is treated as the likely choice in the DEIR, at the December 16, 2009 public meeting, DOT officials appeared to open the door to alternatives like an "Option L" which would dramatically reduce the adverse impacts on abutters' quality of life and on Somerville's economic development potential. As has been repeated by hundreds of commenters, from elected officials to abutters to concerned residents, **Yard 8 must be eliminated from consideration as the site of the maintenance facility**. It would be a cruel irony if an environmental justice project like the extension of the Green Line were to include development of a maintenance facility in Yard 8 that would seriously compromise the living conditions of as vibrant a community as Brickbottom. (Mirror H would likewise be a poor option, given its adverse impact on Glass Factory residents.) And it would be a travesty if an economic engine like the Green Line Extension were to include a maintenance facility in a location like Yard 8 that would undermine the economic potential of Somerville's last significant parcel of developable land at Inner Belt.

I-034-004

As noted above, we were pleased to see that the DOT considers "Option L" to be a top tier possibility. Unfortunately, the currently proposed version of Option L still compromises street connections to Inner Belt, and still requires the taking of commercial property, which adds to the cost of the project, and which compromises the economic development potential of the site.

We have seen our neighbor **Alan Moore's** proposals for an "**Option L-BET**" which would move the facility so that it is almost entirely on Boston Engine Terminal (BET) property, and we think it has a lot of potential. (See Alan's various comment letters and the Google Maps he has created at http://greenlineextension.info/resources/Mirror+Option+L+BET+satellite+no+legend.jpg or http://greenlineextension.info/resources/Mirror+Option+L+BET+street+map+w+legend.jpg for more details.)

I-034-005

As you and DOT officials have heard from elected officials and residents alike, Somerville has historically borne a disproportionate share of the economic and environmental burden of a rail maintenance facility and miles of polluting diesel rail lines (and highways) running through the City, on land that generates no tax revenues, but that obstructs the kind of development that is critical to the City's financial health. **The EIR process should accord the highest rating to the maintenance facility location which has the smallest adverse impact on the health and wellbeing of residents, and which entails the minimum amount of property taking. We think that Alan's proposed Option L-BET fits those criteria, and we encourage you to strongly consider that amended alternative.**

==========

Many of our concerns and recommendations are incorporated in the STEP testimony, but at the risk of being redundant, we have cut and pasted and added our additional thoughts to some of their points that we feel particularly strongly about:

I-034-006

- Green Line stations must connect as seamlessly as possible with all other clean modes of transportation, including current and re-routed buses **and the Community Path and other pedestrian and bicycle routes**. Station design should accommodate bus drop off and pick-up with maximum integration of transit modes and minimal street disruption. **The terminus/station at Union Square should be designed to facilitate future extension along the Fitchburg line to Porter Square**.

I-034-007

- Station designs should allow for car drop off, but not car parking, and present ease of pedestrian and bicycle access by location of stations on major streets whenever possible, with station access from both sides of the street and in all direction of travel. This will maximize transit use. **Stations should be designed to include truly adequate bicycle parking**.

2

I-034-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-034-005

The Boston Engine Terminal (BET) and major modifications to its operations are beyond the scope of the Green Line Extension Project. MassDOT will continue to coordinate with the MBTA to explore possibilities for shared facilities between the Green Line Extension storage and maintenance facility and the BET.

I-034-006

In accordance with the Secretary's Certificate on the DEIR, emphasis will be placed on bicycle, pedestrian, and bus access as station designs are refined during preliminary engineering. Access for environmental justice and disability populations will be carefully evaluated in compliance with federal and state access laws, regulations, and codes. Automobile access, including drop off/pick up areas, station parking, and station area parking policies will also be taken into consideration as they relate to local traffic concerns and station designs. The Public Involvement Plan, Chapter 6 of the FEIR, details MassDOT's plans for public outreach in the next phases of the Project.

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-034-008
I-034-009

- Station and station area designs must be developed through a formal community participation process to ensure that they fit into existing neighborhoods and support appropriate future mixed use development. Takings should be minimized to save the state money and to preserve land uses. **We are dumbfounded at the MBTA's refusal to allow the kind of at-grade pedestrian track crossings that are ubiquitous along the above-ground portions of the B, C, and E Green Line routes, not to mention on most light rail lines across the country and internationally. If the MBTA is concerned about pedestrian safety, why not install gates or other safety devices that prevent passengers from crossing the tracks when trains are coming or are stopped in the station**.

I-034-010
I-034-011

- Design for the project terminus at Lechmere Square should pay particular attention to the East Cambridge Planning Teams pedestrian friendly area design ideas and old Lechmere Station re-use suggestions. The terminus at Route 16 should incorporate MGNAs ideas for minimizing takings. **The terminus at Route 16 should include a pedestrian overpass which facilitates safe crossing of the roadway. The extension to Route 16 should happen as part of the first and only phase of this project; delaying it until some future phase two creates a risk that it will never be extended at all**.

I-034-012

- Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through **reconstruction of Route 28 as a neighborhood and local business friendly boulevard**. Improved connectivity to both sides of Route 28 is crucial.

Thank you for your thoughtful consideration of these and other comments from interested parties.

Fred Berman and Lori Segall
25 Cherry St.
Somerville, MA 02144
Phone: 617-501-1404
Email: fredlori@rcn.com

Fred Berman

617-776-0503
fredlori@rcn.com

3

I-034-007

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-034-008

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-034-009

For safety reasons, MBTA, the future owner and operator of the Green Line Extension, has required that this rapid light rail transit corridor to be entirely separated from vehicular, pedestrian, and bicycle traffic. This separation would not allow pedestrian and bicycle crossing of the tracks at any point.

I-034-010

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the

preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-034-011

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-034-012

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

Michael Bernstein
11 Lyman Avenue
Medford, MA 02155

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles:

I-035-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886. Because I live in Medford Hillside, I will focus my comments on the section of the project around the Mystic Valley Parkway/Route 16 and College Avenue stations. I strongly support the Green Line Extension project, and I urge you to please not accept the DEIR as the Final EIR. The DEIR is incomplete and contains a number of serious flaws.

I-035-002 A fundamental concern is whether the Green Line Extension will actually reach or serve Medford Hillside as required by the 2005 amended State Implementation Plan. The definition of Medford Hillside contained in the DEIR is simply wrong. There are numerous overlapping definitions of Medford Hillside, but none of them include the intersection of College Avenue and Boston Avenue. The definitions of Medford Hillside used by current Medford residents and businesses, by modern and historical maps, by carefully researched books, and by historical evidence all include the area around Boston Avenue from Winthrop Street past North Street toward Route 16. This area is known by everyone who lives here as Medford Hillside, and this area will not be served by a station at College Avenue. Kate Fichter, Project Manager for the Green Line Extension, admitted in an August 2009 public meeting that College Avenue was ill-defined as Medford Hillside. The Preferred, Full-Build Alternative in the DEIR includes a terminus at Route 16, and that alternative would serve Medford Hillside.

Route 16 Terminus vs. College Avenue Terminus

I-035-003 Extending the Green Line to Route 16 would maximize the environmental and economic benefits for local residents as required by the Secretary's Certificate from December 1, 2006. Route 16 would be a station we could access as pedestrians. The DEIR makes it clear that a terminus at Route 16 is far better than a terminus at College Avenue in terms of increased public transit ridership, reduced vehicle miles traveled, service to environmental justice populations, and air quality improvements. A terminus at Route 16 is also far better in terms of access to park land and recreational opportunities around the Route 16 station, access to employment opportunities

I-035-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-035-002

The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (MassDEP DEIR/EA comment letter, January 8, 2010).

I-035-003

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-003 adjacent to the Route 16 station, access to grocery shopping adjacent to the Route 16 station, opportunities for transit-oriented development, connectivity to other transit modes and connectivity to the community paths being built along Route 16.

I-035-004 A terminus at College Avenue means more vehicle traffic through intersections in Medford Hillside that are already operating at an F level of service, and it means that Medford Hillside will suffer through increased traffic congestion and reduced air quality without seeing any benefits from the Green Line Extension. The DEIR analysis of potential stations at College Avenue and Winthrop Street (Appendix B, Section 4.5) concludes that area residential neighborhoods are better served by the Winthrop Street site than by the College Avenue site. The rejection of the Winthrop Street station and the rejection of a station between Winthrop Street and College Avenue is excused in the DEIR by claiming that the area residential neighborhoods will be served by a Route 16 station. These residents obviously cannot be served by a Route 16 station that is not built.

I-035-005 MEPA should require that the Proposed Project in the Final EIR extend the Green Line to Route 16 rather than terminate at College Avenue.

Extending the Green Line to Route 16 as a Second Phase

I-035-006 The costs of building the section from College Avenue to Route 16 in a separate second phase are enormous. The neighborhoods surrounding the College Avenue station will suffer through many additional years of construction. The neighborhoods surrounding the Route 16 station will suffer through many additional years without access to the Green Line. Building the College Avenue station as a terminus, even for a small number of years, will involve a larger footprint for the College Avenue station and the trackwork around it. Many of the negative impacts of that larger footprint are irreversible; once you shift the commuter rail closer to people's homes in order to make room for a College Avenue terminus, the commuter rail will not be shifted back when you extend the Green Line to Route 16.

MEPA should require that the Proposed Project in the Final EIR extend the Green Line to Route 16 as a single project.

Design of a Route 16 Station

The DEIR presents no positive design for a Route 16 station. The project designers told the Medford City Council on November 17, 2009, that the Route 16 station design in the DEIR is a "worst case scenario." It certainly appears to be a worst case scenario in terms of inflating financial costs, increasing environmental costs, and reducing environmental benefits far beyond what is necessary. This inclusion of only a worst case scenario for the Route 16 station is unacceptable.

The DEIR admits that the Route 16 station requires further analysis (Appendix B, Section 4.6), even though the Secretary's Certificate requires that the DEIR analyze a station at Route 16. The DEIR includes a detailed analysis in Appendix B of station access, transit operations, land use compatibility, and project cost for other stations, but does not do so for the Route 16 station. The DEIR also fails to provide mitigation for the environmental impacts of the Route 16 station, or even to show the full range of sensitive land around the Route 16 station.

I-035-004

In accordance with the Secretary's Certificate on the DEIR, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. As described in DEIR Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. Analysis indicated that the preferred location would be at College Avenue.

I-035-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project, extending the Medford Branch to College Avenue Station. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-035-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model

I-035-007 MEPA should require that the Final EIR include a viable design for the Route 16 station that is as fully developed and as fully evaluated as the designs for the other stations.

Costs of a Route 16 Terminus

The DEIR does not present detailed cost breakdowns sufficient to justify its conclusion that the Green Line Extension should terminate at College Avenue or that the section from College Avenue to Route 16 should be relegated to a second phase of the project. Instead, the DEIR presents plans that clearly inflate the cost of the section and then uses that inflated cost to justify relegating the section to a second phase.

The costs of this section could be far reduced by building this section as part of the initial project; by using a track alignment that does not require taking the commercial properties at 200 and 222 Boston Avenue; by keeping the Green Line tracks at ground level as it approaches the Route 16 station instead of elevating them where the commuter rail tracks are elevated to cross Route 16; and by building a much smaller ground-level station that does not require stairs, elevators, and/or escalators.

I-035-008 MEPA should require that the Final EIR include a plan for extending the Green Line to Route 16 in a cost-effective manner.

Design and Impacts of a College Avenue Terminus

The DEIR presents no realistic design for a College Avenue terminus. The design for the College Avenue terminus in the DEIR has a platform that is half the length that project engineers have stated is required for a terminus platform. A full-length terminus platform will require shifting the commuter rail lines closer to residences over a larger area, will increase potential land takings, will increase the number of trees removed, and will increase the environmental impacts for the neighborhood near the College Avenue station. A longer platform may also require a greater curve in the commuter rail tracks, which could require speed changes by the diesel commuter rail trains passing through that area. Project engineers stated at a public meeting that speed changes in these diesel commuter rail trains can increase air pollution 10-fold. The DEIR does not properly present or analyze those increased impacts, nor does it provide for mitigation for those increase impacts.

The DEIR also presents no realistic analysis of—or planning for—the traffic impacts of a College Avenue terminus. With a Route 16 terminus and a College Avenue mid-route station, the DEIR Peak Hour Trip Summary shows 40 pick-up/drop-off passengers at Route 16 and 35 pick-up/drop-off passengers at College Avenue (for a total of 75 vehicle round trips in these areas). With a College Avenue terminus, the DEIR Peak Hour Trip Summary incorrectly shows a total of 40 pick-up/drop-off passengers rather than 75. Shifting the terminus from Route 16 to College Avenue will add 40 pick-up/drop-off passengers to College Avenue; the total number of pick-up/drop-off passengers at a College Avenue terminus will be 75. This increase is not small when many of the intersections in this area are already operating at an F level of service. Each pick-up/drop-off passenger means two vehicle trips through this area, and there is no design in the DEIR for a safe turn-around at College Avenue. A College Avenue terminus will entail a substantial increase in traffic congestion and air pollution, and the DEIR does not acknowledge that increase.

assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch.

I-035-007

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-008

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-009 MEPA should require that the Final EIR fully evaluate the differing requirements of a College Avenue mid-route station and a College Avenue terminus, present a design for a College Avenue terminus, fully analyze the increased impacts of a College Avenue terminus, and commit to mitigation for those increased impacts if a College Avenue terminus is chosen.

Environmental Justice Communities

The DEIR presents benefits to environmental justice communities based on an analysis of extending Green Line service to Route 16 (Section 5.4.4 and 5.4.5 of the DEIR). The DEIR presents these benefits as identical for Alternative 1 (terminating at College Avenue) and Alternative 2 (terminating at Route 16), even though a terminus at College Avenue would not increase transit access for the substantial environmental justice population that is to the north and west of the proposed Route 16 Station. The map in Figure 1 of Appendix G shows environmental justice transit analysis zones that were included in the analysis, and includes a substantial environmental justice population that would not be served by a terminus at College Avenue. If this population is going to be used to justify the project, they should receive the benefit of the project by ensuring that the project will actually extend to Route 16 and serve them.

I-035-010 MEPA should require that the Final EIR evaluate the lowered benefits to environmental justice communities of a College Avenue terminus so that the alternatives can be honestly evaluated.

Mitigation Commitments

The Secretary's Certificate requires that the DEIR provide a clear commitment to implement mitigation measures. The DEIR fails to provide that clear commitment, instead proposing mitigation measures "where feasible" and "to the extent practicable." I can stand on my front porch and see and hear the commuter rail trains at the end of my street, so I want those clear commitments to implement mitigation measures.

I-035-011 MEPA should require that the Final EIR provide a clear commitment to implement mitigation measures.

Specific Mitigation Concerns

I-035-012 The DEIR does not include appropriate mitigation measures during construction. MEPA should require that the Final EIR commit to implementing mitigation measures as early as possible in the construction sequence.

I-035-013 The DEIR does not include appropriate noise mitigation measures around the Route 16 station. The proposed station platform is very close to open park land bordering Mystic Valley Parkway and bordering Auburn Street. This park land should be protected from the increased noise of a Route 16 station. In addition, the maps in Figure 4.2-7 and Figure 4.2-8 in the DEIR are missing the open public park land bordering the Mystic River between the Mystic River and West Street/Auburn Street. These maps should be corrected so that mitigation planning is done based on the actual needs of the area. MEPA should require that the Final EIR include robust noise mitigation measures around the Route 16 station.

I-035-009

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-035-010

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

I-035-011

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-035-012

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

I-035-013

A station at Mystic Valley Parkway/Route 16 and associated alignment

I-035-015
I-035-014

The DEIR does not include a commitment to retrofit the existing diesel commuter rail engines with emission-reduction devices. This simple and comparatively inexpensive step would alleviate many concerns about air pollution increases from shifting the commuter rail tracks closer to people's homes. MEPA should require that the Final EIR commit to reducing the emissions from the commuter rail engines as a necessary mitigation measure.

Poor Analysis of the Station Selection for College Avenue/Winthrop Street

Section 4.5 of Appendix B in the DEIR accurately states that "Two Alternatives were evaluated for the College Avenue Station Site." Bizarrely, neither of those evaluated alternatives was chosen. The first alternative was two separate stations at College Avenue and Winthrop Street, and the second alternative was a single station located by Brookings Street. Those are the only alternatives that were presented at community meetings, and yet both alternatives were thrown out in favor of a new plan in the DEIR. This new plan in the DEIR to have a single station at College Avenue was never presented to the community for feedback. The present plan in the DEIR's Proposed Project to have that station at College Avenue be a terminus was also never presented to the community for feedback.

This section presents two reasons for having no station at Winthrop Street. The first reason is that the area around Winthrop Street is covered by the one-mile walk-catchment areas around the proposed College Avenue and Route 16 stations. However, this reason does not make any sense under the Proposed Project, where there is no Route 16 station. In fact, the analysis admits that the area residential neighborhoods are better served by the Winthrop Street site than by the College Avenue site. Under the Proposed Project (Alternative 1) with no Route 16 Station, much of the area residential neighborhoods are really not served at all.

The second reason for having no station at Winthrop Street is presented under the heading of Transit Operations: "From an operational perspective, having one combined station would reduce delays associated with additional dwelling, accelerations, and decelerations." Those delays only occur for trips that pass through Winthrop Street, so this reason does not apply under the Proposed Project (Alternative 1) where the Green Line Extension terminates at College Avenue. Removing Winthrop Street from the Proposed Project does not remove any delays; it simply limits the population that has access to the Green Line service.

As a tool for choosing among the alternatives for stations around College Avenue and Winthrop Street, the DEIR presents numerical scoring of the alternatives in rating summaries attached to Appendix B. These rating summaries demonstrate a truly bizarre scoring process, where crosswalks at nearby intersections (for example) are weighted equally with ridership projections. Crosswalks and other pedestrian/bicycle crossing enhancements can be added to intersections easily and at little cost. Ridership, on the other hand, is the foundation of every environmental and economic benefit that the entire Green Line Extension can possibly offer.

I-035-016

All of these problems can be remedied by making the Proposed Project be the full-build extension to Route 16. MEPA should require that the Proposed Project in the Final EIR extend the Green Line to Route 16 as a single project.

improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-014

As presented in DEIR/EA Chapter 6, it is anticipated that the Green Line Extension will have a positive impact on outdoor air quality within the study area. Modifications to MBTA Commuter Rail equipment are outside the scope of this project. However, new fuel standards from EPA will result in lower emissions from locomotives, automobiles, and buses.

I-035-015

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

I-035-016

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input

Comments from Michael Bernstein on the Green Line Extension DEIR, page 6

Misleading Maps in the DEIR

I-035-017 Figure 4.4-1 in the DEIR purports to be a map of the state-defined environmental justice populations around the Green Line Extension. This map crops out the environmental justice population to the north and west of the Route 16 station by placing the map boundaries directly next to the Route 16 station. Because this map does not show most of this environmental justice population which would benefit from improved transit access, we cannot see the increased environmental benefit of extending the Green Line to Route 16.

I-035-018 Figure 4.2-7 and Figure 4.2-8 are both missing Cummings Park at the intersection of Lyman Avenue and Cotting Street, a city-owned playground. They are also both missing the open park land bordering the Mystic River between the Mystic River and West Street/Auburn Street. Because these maps do not show the full set of parks near the Route 16 station, we cannot see the increased access to park land and recreational opportunities provided by extending the Green Line to Route 16.

I-035-019 Figure 4.2-10 shows primary use zoning around the Green Line Extension. However, no zoning information is given for the section of Arlington that begins less than ½ mile from the Route 16 station. Providing this information would show that a substantial residential community in Arlington would also be directly served by the Route 16 station, and that the Route 16 station would provide access to substantial additional recreational park land extending along the Arlington side of the Mystic River and the Arlington side of Alewife Brook.

I-035-020 MEPA should require that the Final EIR correct these maps so that the EIR shows the full benefits of extending the Green Line to Route 16 rather than to College Avenue. MEPA should also require that the Proposed Project in the Final EIR extend the Green Line to Route 16 in a single phase, so that these potential environmental benefits can become a reality.

Lack of Public Input Before Producing the DEIR

The public input process before producing the DEIR was inadequate. If you accept the DEIR as the final report, public input will have been bypassed on shaping vitally important aspects of the project.

I-035-021 1. The designs presented for the Route 16 station have changed at every public meeting in terms of basic track alignments, property takings, vehicle and pedestrian access plans, and parking facilities. The plans for the Route 16 station have consistently represented what the project designers have described as a worst case scenario, though the details of what they envision as a worst case scenario have shifted over time. The design for the Route 16 station in the DEIR was never presented to the public prior to the release of the DEIR. The public has had no opportunity to comment on reasonable alternative designs for the Route 16 station, because they have only been presented with designs that are worst case scenarios.

I-035-022 2. The public input process included a station workshop for College Avenue and Winthrop Street, at which two possibilities were presented and discussed: (1) two mid-route stations at College Avenue and at Winthrop Street; and (2) a single mid-route station between College Avenue and Winthrop Street. Both of these possibilities are rejected in the DEIR in favor of a single terminus station at College Avenue. Plans for a terminus at College Avenue were never presented

on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-017

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. Benefits were evaluated based on environmental justice populations within the entire municipalities of Medford, Somerville, and Cambridge. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-035-018

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

I-035-019

Please see response to Comment I-035-018.

I-035-020

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-035-021

A station at Mystic Valley Parkway/Route 16 and associated alignment

I-035-022 to the public prior to the release of the DEIR, even though this is suddenly the DEIR's Proposed Project.

I-035-023 3. The idea of separating out the section from College Avenue to Route 16 into a second project phase was never presented to the public prior to the release of the DEIR, even though this is suddenly the DEIR's Proposed Project.

I-035-024 Earlier in these comments, I have recommended that MEPA should require that the Proposed Project in the Final EIR extend the Green Line to Route 16 in a single phase. If MEPA does so, then the only further public input that I would urge would be a station workshop for a fully developed and viable Route 16 station design. If MEPA does not require that the Proposed Project in the Final EIR extend the Green Line to Route 16 in a single phase, then a public input process is needed on all of these issues. While comments on the DEIR are obviously an opportunity for public input, reading and commenting on 6000 pages of material is intimidating to much of the public and does not provide any opportunity for questions and dialogue.

Conclusion

I want the Green Line Extension to happen, because its environmental benefits can be enormous. I want the project to be the best project it can be, to maximize the benefits and minimize the costs for myself, for my family, for my friends and neighbors, and for my community. This DEIR does not accomplish that.

MEPA has an opportunity to require changes to ensure that the Final EIR does maximize the project benefits for all of us, and ensure that the Final EIR meets the requirements of the SIP from 2005 and the requirements of the Secretary's Certificate from 2006. I urge you not to accept the DEIR as the Final EIR. I urge you instead to require that the Final EIR include the changes I have outlined above.

Thank you for considering my comments.

Sincerely,

Michael Bernstein

improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-022

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue. The alternatives (of which two included as station at College Avenue) clearly were presented to the public before the DEIR/EA.

I-035-023

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-035-024

In accordance with the Secretary's Certificate on the DEIR/EA,

MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Jane Bestor [jbestor@law.harvard.edu]
Sent: Friday, January 08, 2010 2:41 PM
To: Johnson, Holly S (ENV)
Subject: Comments re: EEA #13886EEA

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886

Dear Secretary Bowles,

The residents of Somerville are incredibly excited about the planned Green Line extension. A *hundred people*, including myself, showed up at the last Somervision event on Tuesday evening, January 5th, to brainstorm around the possibilities for the city arising from the promise of adequate mass transit. The release of the Green Line Extension DEIR is an important step in making the promise a reality, and I'm grateful for the opportunity to give comments.

The website of the Somerville Transportation Equity Partnership (STEP) provides exceptionally well-conceived principles and guidelines for planning the extension. Rather than re-inventing the wheel here, I'd like to comment on four points:

I-036-001 1. **Design for multi-modal access**. Somerville has lots of avid bikers, including my sons and myself, who would welcome well-designed access and storage facilities for bikes. Integration with the Community Path to ensure direct pedestrian and bicycle access to the T is critical.

I-036-002 2. **Making Route 28 a Regional Corridor to enhance economic development and reintegrate Somerville.** It's absolutely critical to the welfare of Somerville that all aspects of the Green line designs support the reconstruction of Route 28 *as a surface boulevard* that promotes the economic development of the Brickbottom-Innerbelt area and serves pedestrians and bicyclists as well as cars. The economic impact of this change would be huge and support even greater ridership on the T.

I-036-003 3. **Siting of the Maintenance Facility and Storage Yards.** Somerville bears huge environmental burdens as a result of poor state transportation planning in the past. The negative results on the city's public health, environment, and economic well-being are overwhelmingly evident. The maintenance facility should be sited so as to allow proposed development in the Brickbottom-Innerbelt area and to minimize environmental burdens.

I-036-004 4. **Project-wide Citizens Advisory Group to work with the T on all stages of the planning.** Wonderful idea! There's so much excitement and energy in Somerville around the Green-Line extension, and such an advisory group could create a valuable synergy with the group working with city officials to generate a comprehensive plan for Somerville.

I do not have a license and rely exclusively on public transportation and walking to get to work and to go around Somerville and Boston. I love the T, but it's amazing how clunky most of the stations are. The renovated South Station is *just dreadful*. The one great piece of news is the renovation of the Charles Street Station, which is quite beautiful and turns the station itself into something of a destination. I agree with the STEP guidelines that escalators should not be
I-036-005 included in the new Green-line T stops and think that the money saved could be used on thoughtful design, fine durable materials and enhancements to access. No parking -- at least at the stations in Somerville!

Thank you again for the opportunity to comment.

Sincerely,
Jane Fair Bestor
50A Lowell Street
Somerville, MA 02143

1

I-036-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-036-002

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-036-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real

estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-036-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-036-005

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local

communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

Johnson, Holly (EEA)

From: Jack Beusmans [jbeusmans@comcast.net]
Sent: Thursday, January 07, 2010 9:49 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886

Dear Secretary Bowles,

I am writing with reference to the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-037-001

I urge you to not accept the current DEIR as it does not adequately address the many concerns raised by Medford's Mayor Michael McGlynn and the Medford Green Line Neighborhood Alliance (MGNA), an organization I support strongly. Frankly, I'm rather disturbed that in their recent public comments on the current DEIR, both Mayor McGlynn and MGNA express obvious disappointment and frustration at their interactions with MassDOT. Judging from the DEIR, MassDOT seems to be proud of its outreach efforts and of the many opportunities it provided for public input. However, judging from Mayor McGlynn and MGNA's reactions these efforts at public participation seem to have been pro forma and no constructive dialogue seems to have taken place. I find it rather disappointing that such credible stakeholders as the mayor of Medford and the MGNA, a serious organization representing many citizens in Medford including myself, are essentially ignored. How hard would it be to address their concerns and questions in an open and transparent manner?

I-037-002

I support the green line extension in Medford and would like it to go all the way to Route 16. This alternative should be analyzed more extensively in any final EIR. I urge you to reject the current DEIR and to direct the MassDOT to address the concerns of Mayor McGlynn and MGNA.

Sincerely,

Jack Beusmans
10 Manning St
Medford, MA 02155

1

I-037-001

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

I-037-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Connie Blaszczyk [cbzyk@yahoo.com]
Sent: Sunday, January 03, 2010 11:30 PM
To: Johnson, Holly S (ENV)
Subject: Letters of response to the DEIR
Attachments: ConnieBlaszczyk_DEIR_Letter_1.doc; ConnieBlaszczyk_DEIR_Letter_2.doc

Dear Ms. Johnson

Please find attached two letters that I would like submitted to Secretary Bowles in response to the DEIR, project number EEA 13886.

I will also send you hard copies of the enclosed letters via USPS.

I would appreciate a returned email to confirm your receiving this email and attached letters.

Thank you
Connie Blaszczyk
1 Fitchburg St., B151
Somerville, MA 02143

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing in regards to the Draft Environmental Impact Report on project Number EEA #13886.

I-038-001

As a longtime resident of the Brickbottom Artists Building, I am concerned about the proposed Yard 8 location for the maintenance facility and storage yard. It is difficult to understand why the Yard 8 location is still in discussion after it has been outright rejected by the City of Somerville and when it is so clearly violates the principles outlined in your Certificate for the project.

Your Secretary's Certificate (EENF, *Environmental Justice*, p. 7) states that "no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts."

The Yard 8 citing for the maintenance facility and storage yard will place a tremendous burden on the 200+ residents of the Brickbottom Artist Building, rendering its three buildings currently used as both work and live space as unfit to live in.

As one of the oldest artist communities in the Boston area, Brickbottom residents such as myself are not asking for special treatment -- we are simply asking for *fair* treatment in regard to the placement and construction of the maintenance facility and storage yard.

Since its inception in 1988, when a group of determined artists diligently worked to transform an abandoned A&P warehouse into a vibrant artist community, Brickbottom residents have endured a great deal of noise, pollution and vibration from the nearby Fitchburg Commuter Rail line, as well as Amtrak trains and Pan Am trains that idle by Brickbottom as they wait to enter the Boston Engine Terminal.

To ask us to now absorb the Yard 8 location for the maintenance and storage facility that will serve the needs of the entire Green line, not just the Green Line extension trains, is simply unjust. Add the impact of the Green Line extension on both sides of Brickbottom and you will have wiped out our community altogether.

I-038-002

In 1980, prior to the development of the Brickbottom community, Yard 8 was the site of a major industrial disaster that released 13,000 gallons of phosphorus trichloride. The incident was sizeable and required that 600 local residents be sent to local hospitals. The environmental engineers at the scene of the accident sought to monitor the release of the chemical spill into the soil (see attachments).

Given this history at the Yard 8 site, we ask that proper investigation and testing be done now to the soil in that area to assess the level of pollutants at Yard 8, including other chemicals that have accumulated over the last two decades. Such chemical residue has the potential to adversely impact the health of Brickbottom residents with the construction of the proposed Yard 8 maintenance facility and storage yard. This potential impact was not considered in the DEIR.

I-038-003

While there are currently three locations under review as part of the DEIR, the final location for the maintenance facility and storage yard must adhere to the following guidelines in order to fulfill your Certificate's mandate:

I-038-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-038-002

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

I-038-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-038-003

- The location should consolidate near existing rail uses, reconfiguring and resuing the 43 acres of BET land where possible and consolidating MBTA land uses;
- As stated in your Certificate, the site should minimize any adverse impact on economic development and neighborhood connectivity and should support future mixed-use development;
- The site should be planned in conjunction with comprehensive land use and economic development planning of the Inner Belt area -- the last remaining development land within the city of Somerville;
- It is essential that the storage yard be enclosed and covered to mitigate its impact on abutters;
- Ask that the MBTA asess the proposed size of the storage yard which is disproportionately large and places system-wide burdens of the entire MBTA on this one location and thus adversely impacts Somerville's potential future economic development and the quality of life for local abutters;
- The location should minimize the need to switch and reverse rail cars. It should also avoid use of curved railway patterns that will greatly increase the impact of noise and vibration on nearby abutters.
- We ask that the project not go to a final EIR in regards to the maintenance facility and storage yard.

In addition to its adverse impact on the Brickbottom community, Yard 8 as a location for the maintenance and storage yard will create a permanent barrier to neighborhood cohesion by dissecting the Inner Belt from the Brickbottom area and create a barrier to future economic development.

The Option L location is a promising but imperfect location that needs further study.

Mirror H on the Somerville/Cambridge border is one of the sites preferred by the City of Somerville.

I-038-004

We encourage your office to pursue the following steps in relation to the maintenance facility and storage yard:

- More fully look into Option L and Mirror H sites, following the guidelines above
- Consider other alternatives to Option L and Mirror H sites, such as the proposed
- Remove Yard 8 altogether as a potential site.

Thank you.

Connie Blaszczyk
1 Fitchburg St., B151
Somerville, MA 02143

I-038-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Cambridge, MA 02114

Dear Secretary Ian Bowles,

I am a Somerville resident and taxpayer who has lived at the Brickbottom Artist Building in Somerville's inner-belt district since 1995. I am writing in regard to the Draft Environmental Impact Report (project Number EEA #13886) to express my deep concern with the report and the need to better address the impact of the Green Line Extension on the Brickbottom community and the citizens of Cambridge and Somerville.

Green Line Extension: Noise and Pollution Assessment

With the introduction of the Green Line Extension, residents of the Brickbottom Artists Building will live in perpetuity with two Green Line spurs on either side of the building. Many Brickbottom residents will co-exist with the Green Line just 19 feet away.

This impact will have significant impact on the South side of the Brickbottom building and directly affect the residents of 20 condominiums that face this side of the building. The South side of the Brickbottom building is already severely impacted by noise and vibration due to commuter train traffic on the Fitchburg Line and large Amtrak engines, freight trains and commuter trains that idle on the dead-end railhead.

I-038-005 While noise and vibration assessments were done on the North side of the Brickbottom building as part of the DEIR, no testing has been done on the building's South side. This is in direct violation of the Secretary's Certificate (EENF, *Environmental Justice*, p. 7) which states, "no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts." Without complete measurements, it is impossible to make a proper Environmental Justice evaluation of the Green Line Extension's impact.

I-038-006 The collective noise of the commuter rail, the dead-end rail head and the projected Union Square spur on the South side of the Brickbottom building needs to be measured and calculated to assess required noise and vibration mitigation.

I have experienced first hand for 10+ years the daily impact of noise and vibration from the various trains that regularly run on the South side of the Brickbottom

I-038-005

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds.

I-038-006

Please see response to Comment I-038-005.

building. I feel the shaking of the building from idling Amtrak engines and Pan Am freight cars that idle next to our building countless times a day; my daily life is interrupted by the noise from these trains and the Fitchburg commuter rail line, the smell of diesel exhaust and the high level screeching of box cars and engines that are slowly dragged along the tracks on the way into the terminal, particularly in the late evening hours.

I-038-007

In light of the overall environmental impact of the Green Line and its contribution to the existing environmental impacts of the commuter and freight rail traffic near Brickbottom, we request that MassDOT assign five of the new EPA Level 3 diesel rail engines to the Fitchburg Line to help mitigate the overall environmental impact of existing and new rail traffic in this area. The Fitchburg Line should be prioritized for the replacement of legacy diesel engines.

I-038-008

Additionally, it is essential that a Citizen's Advisory Group (CAG) be formulated at every stage of the project going forward as mandated in the Secretary's Certificate for community involvement in the project. (EENF, *Smart Growth/Land Use*, p. 5)

Proximity of the Green Line Extension to Brickbottom

I-038-009

The DEIR fails to adequately address in detail the exact placement of the Green Line Extension rail lines in proximity to the Brickbottom building. Given its close proximity to the Brickbottom building, moving the Green Line extension as far from the Brickbottom building as possible (even a few feet!) will have a major impact on the quality of life for Brickbottom residents.

I-038-010

On the South side of the building, many Brickbottom residents rely on the road that runs between the building and rail lines for access to the east end of the building and to access the building's underground parking lot. This road is essential as it is used by emergency vehicles to gain access to the east end of the Brickbottom building. The taking of this land will impact access and require the taking of deed parking spaces. The taking of this land for the Green Line Extension has not been studied in the DEIR and its impacts taken into full account.

DEIR Mitigation is Inadequate

I-038-011

The mitigation as outlined in the DEIR is woefully inadequate in how it will address the impact of the Green Line Extension on residents of the Brickbottom building.

The DEIR refutes the use of **sound barriers** due to the height of the Brickbottom building. However, according to the ***Federal government's 2006 Transit Noise and Vibration Impact Assessment*** (FTA-VA-90-1003-06), sound barriers can still provide meaningful sound absorption. "Where the barrier is very close to the

I-038-007

EPA Level 3 locomotives adhere to more stringent air emission requirements but do not have lower noise emission requirements. As presented in DEIR/EA Chapter 6, it is anticipated that the Green Line Extension will have a positive impact on outdoor air quality within the study area. Modifications to MBTA Commuter Rail equipment are outside the scope of the Project. However, new fuel standards from EPA will result in lower emissions from locomotives, automobiles, and buses. FEIR Chapter 8 details the Project's proposed mitigation measures.

I-038-008

As described in the DEIR/EA Section 1.5.3, throughout the development of the DEIR/EA regular coordination with the Advisory Group and local municipalities on various aspects of the Project, including siting of the maintenance facility, occurred. During the Summer of 2008, tutorials on the proposed maintenance facility as well as site visits to existing maintenance facilities were conducted for Advisory Group members. Additionally, in December 2009 a public meeting was held on the various maintenance facility sites.

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-038-009

The precise alignment for the tracks near the Brickbottom Artists Building will be determined during preliminary engineering and final design. The tracks will be located as far from the building as possible. The minimum clearance will probably be about 15 feet.

I-038-011

transit vehicle or where the vehicles travel between sets of parallel barriers, barrier effectiveness can be increased by as much as 5 decibels by applying sound-absorbing material to the inner surface of the barrier." (*2006 Transit Noise and Vibration Impact Assessment*, 6-42.)

This document, which was cited in the DEIR, also recommends that railcars be fitted with **acoustical absorption** under the cars. According to the report, this step has been demonstrated to provide up to 5 decibels of mitigation for wheel/rail noise. The document also recommends the use of vehicle skirts over rail car wheels to provide 5 decibels of mitigation. "By carrying their own noise barriers, vehicles with these features can provide cost-effective noise reduction."

It is a well-regarded fact by noise experts that the greatest source of noise in light rail cars is their air conditioning units. The *2006 Transit Noise and Vibration Impact Assessment* outlines the use of **fan-quieting mitigation** that can be accomplished by installation of quiet, efficient fans. Several new designs are available. We ask that fan-quieting mitigation be implemented on rail cars stored and used on the Green Line Extension. Placement of fans on the Green Line vehicles will make a significant difference in the noise radiated toward all those impacted, including Brickbottom and Glass Factory residents, among others.

Again, these recommendations are included in the 2006 Transit Noise and Vibration Impact Assessment, done by the Federal government. This same document was cited in the DEIR.

The discussion of Green Line Extension proximity to Brickbottom as well as proper mitigation needs to be meaningfully investigated by a Citizen's Advisory Group to be sure that appropriate remediation is taken at every stage of the Green Line Extension's development.

In Summary

I-038-012

In order that the Green Line Extension and the DEIR reflect your own Certificate guidelines, we ask that the following steps be addressed:

- Noise and vibration measurements be taken on the South side of the Brickbottom Artists Building only to adequately assess a baseline of current noise and vibration impacts from existing rail traffic that establish a baseline for current noise, vibration and air quality.

I-038-013

- Exploration of mitigation and changes in practices be done in the use of the dead-ended railhead by AMTRAK, MDOT and PanAm rail.
- Exploration of vehicle mitigation and changes in operations with regard to the Fitchburg Line be carried out.

I-038-010

DEIR/EA Section 5.2 describes the Project's potential temporary and permanent acquisitions. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-038-011

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-038-012

Please see response to Comment I-038-011.

I-038-013

Operations of the Boston Engine Terminal (BET), Amtrak, and MBTA Commuter Rail are beyond the scope of the Green Line Extension Project. The BET "Drill Track," or the track used to access the BET from the west, will be relocated approximately five feet further from the Brickbottom Artists Building as part of the Green Line Extension Project.

I-038-014 | o More adequate exploration of noise and vibration be investigated to mitigate the impact of the Green Line Extension on Brickbottom residents and other residential communities.

I-038-015 | o A Citizen Advisory Group immediately be established to ensure that the community is involved at every phase of Green Line Extension planning.

As a Massachusetts resident, I am depending on your office and the newly-formed MassDOT to carry out the principles that are outlined in your own Certificate and to do right by the Massachusetts citizenry in the development of the Green Line Extension.

Thank you.

Sincerely,

Connie Blaszczyk
1 Fitchburg St., B151
Somerville, MA 02143

I-038-014

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-038-015

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing in regards to the Draft Environmental Impact Report on project Number EEA #13886.

I-039-001

As a longtime resident of the Brickbottom Artists Building, I am concerned about the proposed Yard 8 location for the maintenance facility and storage yard. It is difficult to understand why the Yard 8 location is still in discussion after it has been outright rejected by the City of Somerville and when it is so clearly violates the principles outlined in your Certificate for the project.

Your Secretary's Certificate (EENF, *Environmental Justice*, p. 7) states that "no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts."

The Yard 8 citing for the maintenance facility and storage yard will place a tremendous burden on the 200+ residents of the Brickbottom Artist Building, rendering its three buildings currently used as both work and live space as unfit to live in.

As one of the oldest artist communities in the Boston area, Brickbottom residents such as myself are not asking for special treatment – we are simply asking for *fair* treatment in regard to the placement and construction of the maintenance facility and storage yard.

Since its inception in 1988, when a group of determined artists diligently worked to transform an abandoned A&P warehouse into a vibrant artist community, Brickbottom residents have endured a great deal of noise, pollution and vibration from the nearby Fitchburg Commuter Rail line, as well as Amtrak trains and Pan Am trains that idle by Brickbottom as they wait to enter the Boston Engine Terminal.

To ask us to now absorb the Yard 8 location for the maintenance and storage facility that will serve the needs of the entire Green line, not just the Green Line extension trains, is simply unjust. Add the impact of the Green Line extension on both sides of Brickbottom and you will have wiped out our community altogether.

I-039-002

In 1980, prior to the development of the Brickbottom community, Yard 8 was the site of a major industrial disaster that released 13,000 gallons of phosphorus trichloride. The incident was sizeable and required that 600 local residents be sent to local hospitals. The environmental engineers at the scene of the accident sought to monitor the release of the chemical spill into the soil (see attachments).

Given this history at the Yard 8 site, we ask that proper investigation and testing be done now to the soil in that area to assess the level of pollutants at Yard 8, including other chemicals that have accumulated over the last three decades. Such chemical residue has the potential to adversely impact the health of Brickbottom residents with the construction of the proposed Yard 8 maintenance facility and storage yard. This potential impact was not considered in the DEIR.

I-039-003

While there are currently three locations under review as part of the DEIR, the final location for the maintenance facility and storage yard must adhere to the following guidelines in order to fulfill your Certificate's mandate:

I-039-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-039-002

Please see response to Comment I-039-001.

I-039-003

Please see response to Comment I-039-001.

I-039-003

- The location should consolidate near existing rail uses, reconfiguring and resuing the 43 acres of BET land where possible and consolidating MBTA land uses;
- As stated in your Certificate, the site should minimize any adverse impact on economic development and neighborhood connectivity and should support future mixed-use development;
- The site should be planned in conjunction with comprehensive land use and economic development planning of the Inner Belt area -- the last remaining development land within the city of Somerville;
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- Ask that the MBTA asess the proposed size of the storage yard which is disproportionately large and places system-wide burdens of the entire MBTA on this one location and thus adversely impacts Somerville's potential future economic development and the quality of life for local abutters;
- The location should minimize the need to switch and reverse rail cars. It should also avoid use of curved railway patterns that will greatly increase the impact of noise and vibration on nearby abutters.
- We ask that the project not go to a final EIR in regards to the maintenance facility and storage yard.

In addition to its adverse impact on the Brickbottom community, Yard 8 as a location for the maintenance and storage yard will create a permanent barrier to neighborhood cohesion by dissecting the Inner Belt from the Brickbottom area and create a barrier to future economic development.

The Option L location is a promising but imperfect location that needs further study.

Mirror H on the Somerville/Cambridge border is one of the sites preferred by the City of Somerville.

I-039-004

We encourage your office to pursue the following steps in relation to the maintenance facility and storage yard:

- More fully look into Option L and Mirror H sites, following the guidelines above
- Consider other alternatives to Option L and Mirror H sites, such as the proposed
- Remove Yard 8 altogether as a potential site.

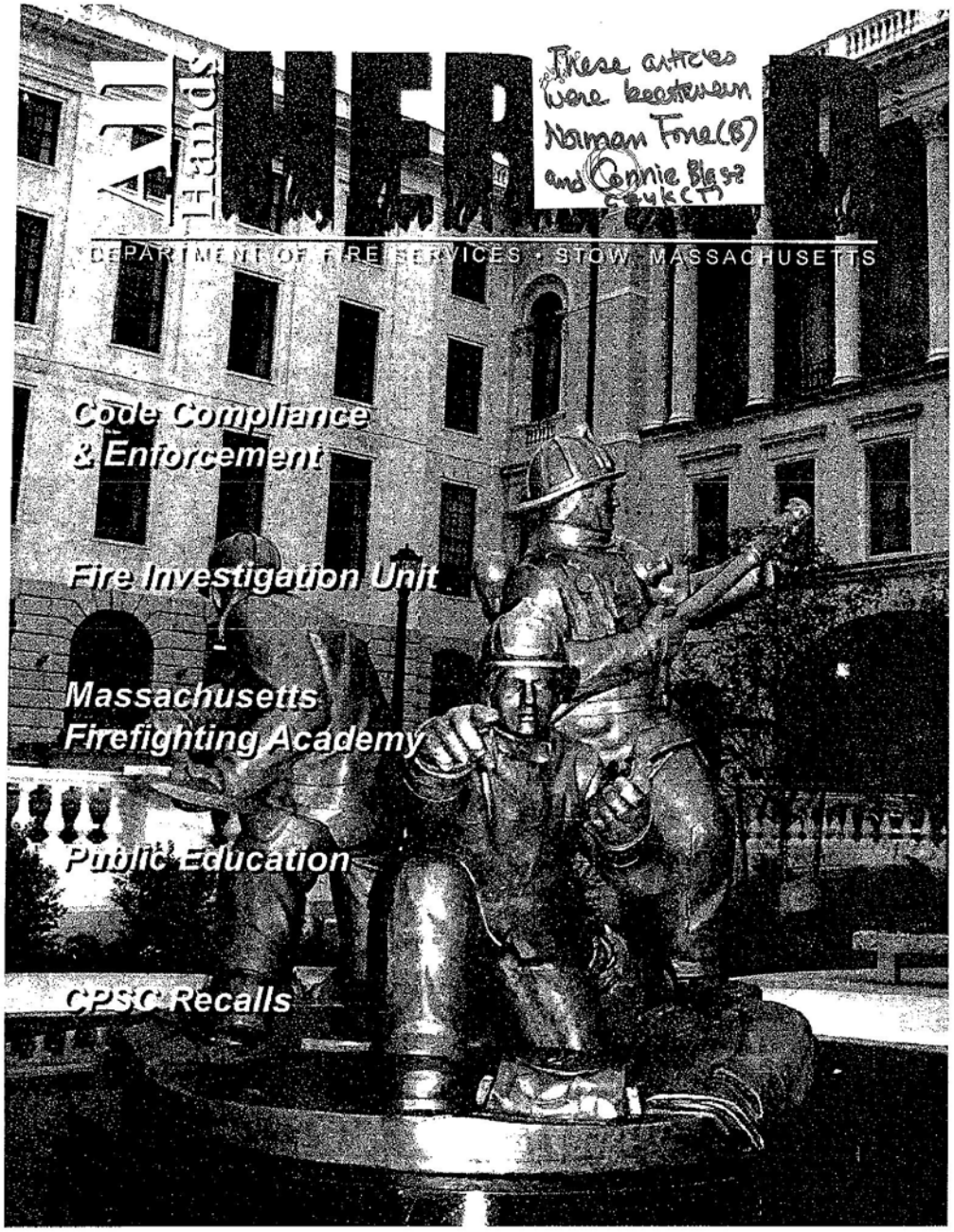
Thank you.

Connie Blaszczyk

Connie Blaszczyk
1 Fitchburg St., B151
Somerville, MA 02143

I-039-004

Please see response to Comment I-039-001.


All Hands
HER
These articles were beetwein Norman Fone(B) and Connie Blasz Seyk(T)
DEPARTMENT OF FIRE SERVICES • STOW, MASSACHUSETTS
Code Compliance & Enforcement
Fire Investigation Unit
Massachusetts Firefighting Academy
Public Education
CPSC Recalls

Rescue Technician: Rope Rescue Certification

Beginning this past fall, the Mass. Firefighting Academy offered, for the first time, certification in *Rescue Technician: Rope Rescue* in accordance with NFPA 1006. The Technical Rescue office has been working closely with the Certification office to develop this certification exam both written and practical.



Photo by: Barry Hyvarinen

The core requirements for the exam are stipulated in *chapter 5 of NFPA 1006 Rescue Technician: Rope Rescue 2003 ed.* Currently, the Mass. Firefighting Academy's two rope programs, *Rope Rescue: Operational Level* and *Rope Rescue: Technician Level* are one of the means to obtain these core requirements. These programs also develop the practical skills to take the rope rescue certification exam practical. If a candidate has the core requirements of training and documentation from another state, they can submit for consideration to the Certification office at the Mass. Firefighting Academy.

This Pro Board certification will examine each candidate's knowledge, skills and abilities to safely deal with rescuing a victim in a precarious position using ropes as the means to get them down or up safely. The student will be challenged in all aspects of rescue techniques: rope rescue, constructing anchors, mechanical advantage systems, and belay devices.

For questions about the rescue technician: rope rescue certification exam please call the Certification office at (978) 567-3223. For questions about the core requirements or Technical Rescue classes, please contact the Technical Rescue office at (978) 567-3214 or check the DFS website at http://www.mass.gov/dfs/mfa/index.shtm for scheduled classes and registration information. ✦

Propane Emergency Response Plan Revised for New England

The Propane Gas Association of New England has revised their Propane Emergency Response Plan/Guide for New England. This guide is available for download at www.pgane.org to provide assistance to federal, state, and local emergency response groups for a quick and effective response to propane related incidents. Once on the website, select the Safety & Training link, which will then give you several selections...click on the E.R. Plan (it might ask you to download an Adobe program if you do not have it...this is free of charge and only takes a couple of seconds to download). ✦

HazMat Training Group Presents at International Conference

The Hazardous Materials Training group presented at the International Association of Fire Chiefs' (IAFC) International Hazardous Materials Response Teams Conference May 31 through June 3 2007 at Hunt Valley Maryland. The IAFC conference is recognized worldwide as the premier conference for the hazardous materials response teams.

Assistant Coordinators Bob Zalewski and Gordon Diotalevi, Program Coordinator Marty Greene, and Hazardous Materials Response Director David Ladd were all in attendance.

DFS staff was invited to share with other first responders from all over the world how the Commonwealth has prepared to respond in a unified fashion to hazardous materials incidents and incidents potentially involving weapons of mass destruction (WMD).

1980 Somerville HazMat Incident

A brief history of the tragic hazardous materials incident in Somerville, MA was reviewed. At 9:05 a.m. on April 3, 1980, a tank car was being pulled through the railroad switching station in Somerville. Inside were 13,000 gallons of phosphorus trichloride. A 38-car freight train creeping along a track sideswiped the tank car, ripping a gash in the half-inch steel skin of the tank car, three inches wide by 20 inches long. The only prior incident known was a 200-gallon spill, which left little information to assist the Somerville Fire Department.

The immediate resource available at the time was the 1978 version of the *Emergency Response Guidebook* (ERG), which recommended:

CONTINUED ON PAGE 10

HazMat Training Group Presents at Conference

Continued from page 9

- Apply water spray
- The ERG (1978) recommended using a fine mist to reduce the vapor, but explicitly precluded direct water spray on a spill.
- It also called for a dike to contain the spill until "removal apparatus" was available.

At 9:30 a.m., officials ordered evacuation of adjacent areas and alerted Boston and Cambridge officials about the growing toxic gas cloud.

At 10 a.m. area hospitals began implementing disaster plans.

At 11 a.m. it was determined that the cloud posed a threat to commuters and transportation and police began evacuating people as far away as Route 93 and the Mystic-Tobin Bridge.

Shortly after 1 p.m. the leak was contained. About 9,500 gallons had spilled. The wind shifted, and evacuation orders expanded.

By 11:30 p.m. the pit was filled with sand and soda ash, while environmental engineers monitored how much, if any, of the chemical was leeching through soil. By 1 a.m., the estimated 17,000 evacuated people were allowed to return to their homes.

In the end, more than 600 victims were seen at 10 area hospitals. At Somerville Hospital, 457 patients exposed to fumes showed a 20 percent liver abnormality rate, suggesting potential liver damage. The incident lasted less than 24 hours, but cost well over $500,000 (1981) to Somerville and at least that much to other participating agencies.

In 1981 the fire service in MA sought to find a solution. The Massachusetts Firefighting Academy (which pre dates the state Department of Fire Services) with the help of the Massachusetts Fire Chiefs' Association & Professional Fire Fighters of Massachusetts, developed what we know now as the Hazardous Materials Response Division within DFS.

DFS and the Hazardous Materials Response Division was one of the first "regional" teams in the nation. Further, Massachusetts is truly a regional hazmat team.

While there are many "regional" teams, Massachusetts is one of the few that maintains statewide response to both large and small incidents.

The unified approach to response in Massachusetts grew out of the regional hazmat response program. The many different agencies that have sought training post 9/11 have all had programs derived out of the hazardous materials technician class that the Massachusetts Firefighting Academy offers. Clearly, it is an example of the benefits of training using a multi-agency approach that has been noted by other states.

With the success of the regional hazmat response teams, other agencies in the state sought assistance from DFS. The foundations of training needs were from the existing Hazmat Technician class.

A standardized hazardous materials program for public safety agencies was established by the Massachusetts Firefighting Academy. Standard operating procedures have been created to provide standardized response techniques, team management, and safety of the team members. A "system approach" has been established for the response and mitigation of incidents through a unified command system.

Development of training for agencies such as the Massachusetts State Police Crime Scene Services and the Department of Public Health Chem/Bio groups (to name a few) were created with the same framework using a needs assessment:

- Objectives & goals;
- Needs based, mission specific;
- Most could not operate independently;
- Training needs determined before equipment needs.

The outcome was a common sense approach to response. The hazmat teams and other public safety agencies must respond to deal with the issues of today. With the baseline training of the hazardous materials technician course given to our firefighters, and the training given to other responding agencies, makes a perfect fit for the "Unified Approach" to training and response. ♦



1980 Somerville HazMat Incident

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-040-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-040-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

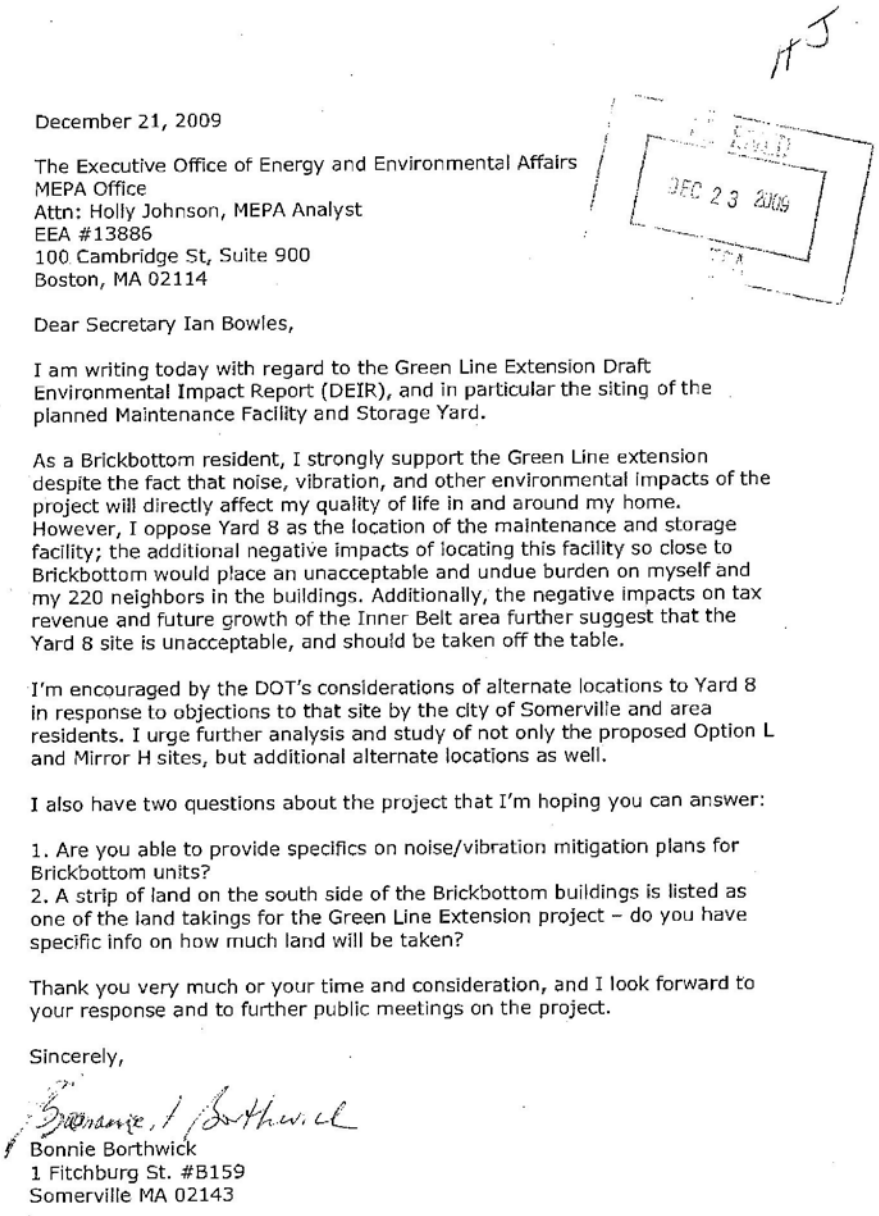
Thank you for hearing my concerns.

Sincerely,

Jose F. Borges
Signature

JOSE. F. BORGES
Print Name

169 Monsignor O'Brien HWY #704, Cambridge Ma, 02141
Address



December 21, 2009

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St, Suite 900
Boston, MA 02114

DEC 23 2009

Dear Secretary Ian Bowles,

I am writing today with regard to the Green Line Extension Draft Environmental Impact Report (DEIR), and in particular the siting of the planned Maintenance Facility and Storage Yard.

As a Brickbottom resident, I strongly support the Green Line extension despite the fact that noise, vibration, and other environmental impacts of the project will directly affect my quality of life in and around my home. However, I oppose Yard 8 as the location of the maintenance and storage facility; the additional negative impacts of locating this facility so close to Brickbottom would place an unacceptable and undue burden on myself and my 220 neighbors in the buildings. Additionally, the negative impacts on tax revenue and future growth of the Inner Belt area further suggest that the Yard 8 site is unacceptable, and should be taken off the table.

I-041-001

I'm encouraged by the DOT's considerations of alternate locations to Yard 8 in response to objections to that site by the city of Somerville and area residents. I urge further analysis and study of not only the proposed Option L and Mirror H sites, but additional alternate locations as well.

I-041-002

I also have two questions about the project that I'm hoping you can answer:

1. Are you able to provide specifics on noise/vibration mitigation plans for Brickbottom units?

I-041-003

2. A strip of land on the south side of the Brickbottom buildings is listed as one of the land takings for the Green Line Extension project – do you have specific info on how much land will be taken?

I-041-004

Thank you very much or your time and consideration, and I look forward to your response and to further public meetings on the project.

Sincerely,

Bonnie Borthwick
1 Fitchburg St. #B159
Somerville MA 02143

I-041-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-041-002

Please see response to Comment I-041-001.

I-041-003

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. An expanded analysis of potential noise and vibration impacts at the Brickbottom Artists Buildings is included in FEIR Chapter 8. These projections take into account the collective impacts of rail uses in the area. During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-041-004

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

Johnson, Holly (EEA)

From: bovamarie@comcast.net
Sent: Saturday, January 02, 2010 1:58 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Comment

I-042-001 My husband & I would like to voice our opinion on the Green Line extention to Rt. 16. Both os us our oppossed to it because the North St. bridge and College Ave. Bridge have recently been done over and also too many people would be without their homes.

Thank you

I-042-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Chris Braiotta [chris.braiotta@gmail.com]
Sent: Saturday, January 02, 2010 7:56 PM
To: Johnson, Holly S (ENV)
Subject: public comments for EEA #13886

Ms. Johnson,

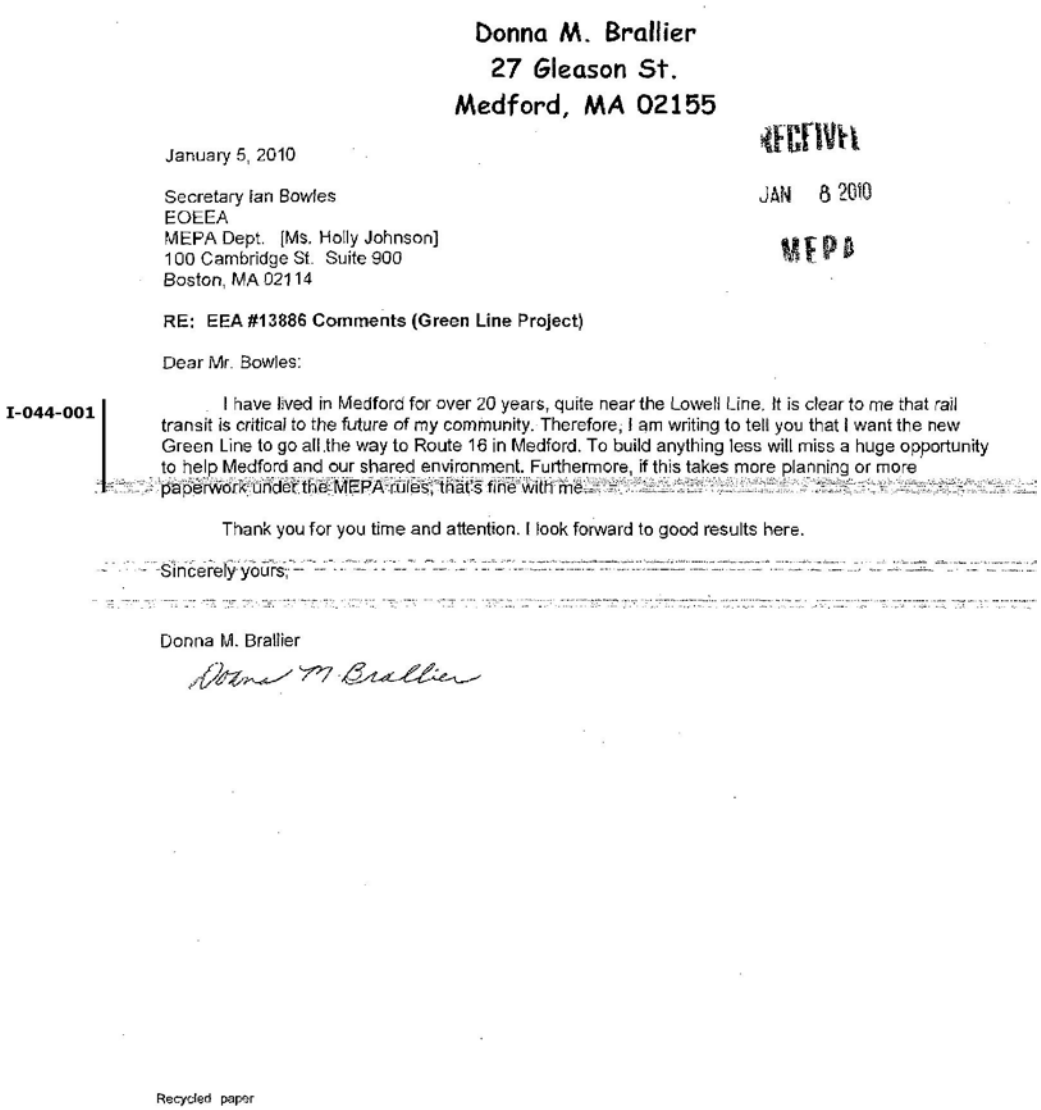
I-043-001

I am writing to you to extend my fervent support for the extension of the Green Line into Somerville and Medford. Not only is this project long overdue from the standpoint of legal and promised commitments, it's long overdue from the standpoint of environmental and urban needs. That Somerville and Medford have been forced to endure this long wait all these decades is a situation that needs to end. The benefits to both the local communities and the region as a whole are too great to ignore.

Thank you,
Chris Braiotta
Resident of Somerville

I-043-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.



Donna M. Brallier
27 Gleason St.
Medford, MA 02155

RECEIVED
JAN 8 2010
MEPA

January 5, 2010

Secretary Ian Bowles
EOEEA
MEPA Dept. [Ms. Holly Johnson]
100 Cambridge St. Suite 900
Boston, MA 02114

RE: EEA #13886 Comments (Green Line Project)

Dear Mr. Bowles:

I-044-001

I have lived in Medford for over 20 years, quite near the Lowell Line. It is clear to me that rail transit is critical to the future of my community. Therefore, I am writing to tell you that I want the new Green Line to go all the way to Route 16 in Medford. To build anything less will miss a huge opportunity to help Medford and our shared environment. Furthermore, if this takes more planning or more paperwork under the MEPA rules, that's fine with me.

Thank you for you time and attention. I look forward to good results here.

Sincerely yours,

Donna M. Brallier

Donna M Brallier

Recycled paper

I-044-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Len Brault [lbrault@clockworkcommerce.com]
Sent: Friday, January 01, 2010 9:40 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension to Medford

Dear Honorable Ms. Johnson,

I-045-001 As a resident and small businessman operating in Medford, I heartily agree with the evaluation of the Green Line extension project to terminate short of Rte. 16. Extending the Green Line to Rte 16 will cause the destruction of important businesses and a traffic problem near that intersection, which if one is to review the current statistics, is one of the most dangerous intersections in Medford and along the length of Rte 16.

I-045-002 Please do not listen to the Medford Green Line Neighborhood Alliance on this issue. I cannot locate any of these people here in Medford, I don't know who they are or why they think they speak for us. They insist on this extension to the Rte 16 area, but it would be a serious mistake. I speak for many people who live and work in the area and would like to see a Green Line extension to our area, but NOT all the way to Rte 16. It was wonderful to hear that study recommends stopping the project short of the Rte 16 area. Thank you--

Len Brault
51 Century Street
Medford, MA 02155
617-852-4009

I-045-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-045-002

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

January 3, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge St. Suite 900
Boston, MA 02114

Attn: Holly Johnson
Re: EEA#13886

Dear Secretary Bowles:

I-046-001

I have read the DEIR analysis of the environmental effects of a Yard 8 rail maintenance facility and storage yard on the Brickbottom area, and I am appalled. The study is embarrassingly flawed. In fact, it appears--either purposely or incompetently--to ignore problems or miscalculate every potential type of pollution--air, sound, light, noise and soil--that would affect the areas surrounding Yard 8.

Given the environmental catastrophe that would be inflicted on the 155 units within the three buildings of the Brickbottom Artists community, I ask that you eliminate Yard 8 from consideration as a site for the new facility and study instead the feasibility of other sites, such as Mirror H, which would eliminate inevitable hazardous effects on nearby residents and ultimately prove far more economical.

The elimination of Yard 8 from consideration would be significant, too, on additional economic grounds: this area of Somerville had already been on the list designated for community development, something of which the DoT should have been aware and taken into consideration. In fact, it is the new T stop that makes possible the development plans, which would improve a significant area of the city and bring a much needed increase in the Somerville tax base.

I-046-002

It should be noted, too, that while the new T stop is mandated by law to be built by 2014, the maintenance facility is NOT legally required and, in fact, if it were to be placed in Yard 8, would defeat the purpose of the mandate, which was to ameliorate the heavy burden of pollution already suffered by the city of Somerville.

I urge you to end all consideration of Yard 8 as a site for the Green Line maintenance facility and storage yard.

Yours,

Alan Brody

1 Fitchburg St B155
Somerville, MA 02143

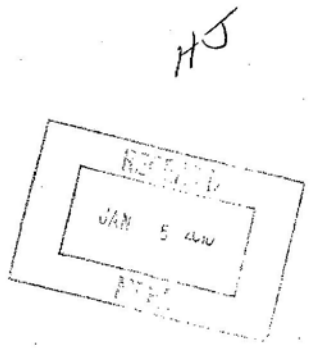
I-046-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-046-002

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

HJ



January 3, 2010

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: EEA #13886

Dear Secretary Bowles:

The DEIR/EA on the Green Line extension project appears both incomplete and misleading in regard to the effects of placing the maintenance and storage facility on the Yard 8 site. I am puzzled and deeply troubled that MASSDoT continues to consider that environmentally unsuitable site when there are others, such as Mirror H, that are clearly safer, more efficient, less costly, and would in addition allow the economic growth foreseen for the Brickbottom neighborhood. Given the available alternatives, I don't understand why DoT continues to consider the one site that would destroy the economic viability of the area as well as the quality of life of the 220 residents of the Brickbottom Artists Studios.

At meeting after meeting, Somerville residents and representatives have unanimously objected to using Yard 8, and yet the DoT does not seem to have listened. Worse, they have presented us with a flawed DEIR that refuses to recognize the impossibility of actually mitigating the appalling effects the Yard 8 plan would have on the entire Brickbottom population.

The Green Line extension was required by law because the city of Somerville was (and is) already suffering the effects of an overburdened environment. We have one of the highest rates of childhood asthma in the country. We are already overrun with trains, tracks, and yards serving other communities. I beg you to honor the EENF statement in the Secretary's Certificate that says "no segment of the population . . . should bear a disproportionate burden of environmental impacts." Please reject Yard 8 as a location for new rail facilities.

I-047-001

Sincerely yours,

Paula Brody

Paula Brody

1 Fitchburg St B155
Somerville, MA 02143

I-047-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Bronk, Peter [pfb1895@comcast.net]
Sent: Friday, January 08, 2010 5:38 AM
To: Johnson, Holly S (ENV)
Subject: Comment on Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Via email: Holly.S.Johnson@state.ma.us

Dear Secretary Bowles:

I-048-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

As a property owner in West Medford for the past 30 years, and someone who has worked in the Hillside area, Cambridge, and downtown Boston, I appreciate the transportation situation in the area as much as anyone. The roads and highways going to Somerville via Medford Hillside can be clogged with cars, trucks and busses at various times of the day. Having a light rail system will surely mitigate the pollution, noise, waste of time and money, and the potential hazards to life and property which accompany jammed thoroughfares.

To do this, however, it is imperative that no terminus to the Green Line Extension be opened, even temporarily in the College Ave area. This will make the situation worse than it exists today because of feeder traffic.

Far better to plan for and, in one effort, get the terminus built to Route 16 by December 31, 2014, which is the optimal location to handle drop-off traffic and will put thousands more commuters within walking distance of a light-rail stop, keeping their cars off the road.
Neighborhood density remains uniformly high throughout West Medford and, adjoining, in East Arlington and West Somerville; the "Hillside" neighborhood effectively goes right up to Rt 16 and CANNOT be said to be effectively served unless the Green Line goes beyond College Ave.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the above and the following reasons, I strongly urge you to not accept the DEIR as the Final EIR andrequire further environmental analysis of the project by MassDOT:
• **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs

1

I-048-001

Please see Comment Letter I-002 for responses to this form letter.

required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is ofserious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenatio" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenatio."

I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Peter Bronk
24 Bower St.
Medford, MA 02155

East Cambridge
ECPT
Planning Team

January 7, 2010

RECEIVED
also by Email
JAN 10 2010
FAXED
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

As a longtime resident of East Cambridge and as President of the East Cambridge Planning Team, I am writing to express the concerns of my neighbors as well as my own about the planned move of the Lechmere T station across McGrath Highway..

I-049-001 Lechmere Square is one of the major gateways to Cambridge and an integral hub of our neighborhood. According to reports from those studying area business potential, more than one million people cross Cambridge Street from the present T stop at Lechmere to shop at the Galleria Mall on First Street every year. That number alone, along with Somerville and Cambridge residents using public transportation, is an inordinate amount of people crossing a major highway.

Our principal concerns is safety. Crossing a major highway and a busy intersection can present problems for those using public transportation as well as for the development of the new station. We want to insure that all crossings at Cambridge Street and Monsignor O'Brien Highway are well designed and offer the utmost protection for everyone using the T.

I-049-002 Another concern is the station design. Riders deserve a station that offers protection from the elements while purchasing Charlie Cards as well as easy access from both sides of the Highway. The preliminary design shown to residents at a recent meeting left much to be desired. More than one entrance and easy access for the handicapped will help to ensure an increase in ridership. Also, we sincerely believe that the Green Line and bus station design need to be properly integrated with the future Northpoint street grid. This will further insure safety for those using the bus service and the T.

I-049-003 Last, but not least, we would like to see the historic station buildings redeveloped around a new public market square. Members of the East Cambridge Planning Team firmly believe that this concept could be done with little or no expense to the T. A lively square/market area will make crossing two busy streets easier for those using public transportation and will add to the value of the area. A plan that members of the East Cambridge Planning Team has shown to Cambridge city staff and elected officials has received enthusiastic support. Make Lechmere a destination not just a transition point.

Thank you for your consideration.

Barbara Broussard

Barbara Broussard, President
East Cambridge Planning Team

I-049-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-049-002

FEIR Chapter 5, Lechmere Station, includes a revised conceptual design for Lechmere Station. The chapter addresses many of the concerns noted in your letter. A detailed station design will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-049-003

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

Johnson, Holly (EEA)

From: pembrown@gmail.com on behalf of Pem Brown [pem@pembrown.com]
Sent: Thursday, January 07, 2010 12:10 PM
To: Johnson, Holly S (ENV)
Subject: DEIR comments for the Green Line Extension project to Medford, EEA #13886
Attachments: Francis P Brown - DEIR Comments - 01.07.2010.docx

January 7, 2010
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-050-001 First of all, I strongly support the Green Line Extension and urge that it be built in the most practical, beneficial and cost-effective manner that is, to construct the entire project in **one phase**, with a **terminus station at Mystic Valley Parkway (Route 16)**, by December 31, 2014.

I am a relatively new resident to Medford (having moved to the Hillside neighborhood in June 2009). Having lived in Cambridge for the previous three years, I strongly believe that an effective mass transit system is important and vital for our communities. I moved to Medford under the assumption that the Green Line Extension would be completed in an efficient and effective way. The DEIR makes me think otherwise.

I-050-002 I disagree that a terminus station at College Avenue fulfills the states legal commitment to serve the Medford Hillside neighborhood, as the vast majority of what is generally considered the Hillside area is located from one-half to three-quarters of a mile from where service would terminate.

I-050-003 The DEIR presents what MassDOT describes as a worst-case scenario for the Mystic Valley Parkway (Route 16) station the only element of the project treated in such a fashion in the DEIR. The station analysis is incomplete and its design is flawed, inadequate, and inflicts unnecessary environmental impacts.

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be.

Sincerely,
Francis Brown
17 Orchard St
Medford, MA 02155
215-205-5555

I-050-001

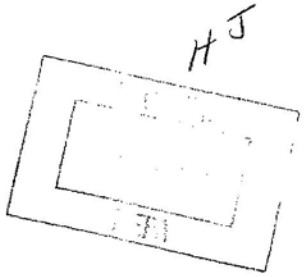
Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-050-002

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-050-003

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
RE: Project EEA#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

My name is Andrés Bueno, I'm 19 and have been a life long resident at Brickbottom. The expansion of the Green Line into our community may bring benefits to local residents only if the project is overseen properly. In order for this to happen, it is crucial to consider all impacts the expansion may have on us.

I-051-001

In order to assure that our voice is heard during the planning process, I ask you that a Citizen Advisory Committee be created to oversee the rest of the project. This would ensure that the community has a voice in the rest of the process. One of the jobs of the CAC would be to review every contract in the bid process to confirm that agreed to mitigation language is included before contracts related to the Green Line expansion are awarded.

Brickbottom is already situated next to the Fitchburg Line that carries, both commuter and freight trains that already create huge amounts of noise and disturbance for residents. The expansion and a 24-hour maintenance facility will sandwich Brickbottom and further disrupt our lives.

I-051-002

In addition a maintenance facility in Yard 8 will permanently separate Brickbottom from the rest of the Somerville community. It will prevent future development in one of the few remaining areas of undeveloped land, while at the same time lower property value.

I-051-003

To prevent this, I encourage that other options be further explored, such as the Mirror H at the Somerville/Cambridge border and Option L in the Inner Belt area. I also request that proper steps are taken to minimize any disturbances Green Line trains may cause for Brickbottom residents.

Thanks you for your time,

Thank you,

Andrés Bueno

I-051-001

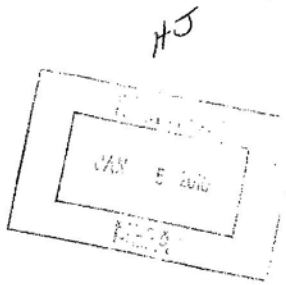
In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-051-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-051-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. The mitigation measures and steps required for implementation and post-construction monitoring required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
RE: Project EEA#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am 14 years old and have been living at Brickbottom for my whole life. I am writing in regards to the Draft Environmental Impact Report on project Number EE#13886. I think that extending the Green Line into Somerville is a good idea and will not only help many people but also reduce traffic.

I-052-001

But putting the storage yard and maintenance facility right next to our building will be too much for our community. We already live with commuter and cargo trains going by both sides of our building, and the Green Line will also go on both sides of our building. Most of us here support that but having a year round, 24 hour, facility and yard on top is unjust.

I think that you should either consider a different site, or not include it while extending the Green Line. Even without it I am worried about the noise and pollution that will occur due to the new trains running from early morning to late at night, every day and only a short distance from our home.

Thank you,

Joelle Bueno, 8th grader

Joelle Bueno

I-052-001

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies. An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

#5



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
RE: Project EEA#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I write with regard to the Draft Environmental Impact Report (DEIR) as it relates to the location of the proposed 24-hour maintenance facility and train storage yard for the Green Line extension through Somerville. As a strong supporter of the Green Line extension, I welcomed the DEIR process and the public hearings held to gather feedback. However, along with many of my neighbors I have very serious concerns with (a) Yard 8 remaining the preferred site for the maintenance facility/storage yard, (b) the still inadequate analysis of the noise, vibration and other environmental costs likely to be permanently imposed on our community at Brickbottom. I hope the opinions and suggestions of our community and of the many others in Somerville, including our elected officials, are seriously incorporated as revisions to the plans for the Green Line extension.

I have lived in Somerville for 30 years, and at the Brickbottom Artists Building for the past 22 years where my wife and I have raised a family (we have a 19 year old son and a 14 year old daughter). We have been supporters of the Green Line extension despite the fact that it will mean constant, additional daily train traffic a few yards from our home. I say *additional* because we already have noisy daily train traffic a few yards away -- on the south side of our buildings, the Fitchburg commuter line and the freight train coming from Cambridge; another freight train along the north side of our buildings. Please note that both new branches of the Green Line (i.e., including the Union Square branch) will permanently add more frequent train traffic immediately adjacent to these same southern and northern sides of our buildings (from early mornings to late at night).

Despite it all, most of us recognize the value to Somerville at large and to the region's environmental and economic health from hosting the Green Line extension and support the Green Line extension literally a few feet away from us. This is clearly *not* a case of protesting about our "back yards". However, there must be a line drawn somewhere as to what constitutes and inordinate and disproportionate burden on our community—Yard 8 as the site for maintenance facility/storage yard is precisely that.

"Yard 8" hosting the maintenance facility/storage yard also places an unfair burden on Somerville by compromising the near-future and long-term economic development potential that the city dearly counts on to relieve our residential taxpayers (we have a smaller commercial tax base than most communities...) and those of the Commonwealth of Massachusetts (..and receive proportionately higher state aid). That proposed use for Yard 8 will cripple the combined prospects of the Brickbottom/Inner Belt area, so valuable by virtue of being close to world class universities (MIT, Harvard, Tufts), to leading research and

high-tech centers (from Kendall Square to Massachusetts General Hospital, etc.), to Logan airport, Boston harbor, and so on. Over the decades Somerville has paid a high price in excess traffic and increased exposure to air pollution and other health hazards by decisions of limited local benefit (Route 93, its exit ramp at Sullivan, McGrath Highway, commuter trains with no local stops, etc.). We cannot sustain another permanent transportation imposition such as using Yard 8 as the DEIR suggests.

I-053-001
I-053-002

Along with my neighbors, my family and I support The Green Line extension but definitely not the maintenance facility/storage in Yard 8. We hope the inclusion of the "Mirror H" and "Option L" sites is a serious sign that alternatives are being explored, though each has problems that need further study and redesign to minimize impacts on other communities (such as minimizing parking and land-takings, sharing and consolidating more with existing rail uses). If necessary, the maintenance and storage needs should be considered separately and/or at different stages.

I-053-003

Whatever the resolution of that siting decision, mitigation and other possible remediation solutions are still needed regarding serious noise and vibration concerns at Brickbottom both during the construction phase and permanently once the Green Line extension is operational. So far these have not been adequately addressed, as reflected in the DEIR document; both in terms of noise/vibration studies and proposed remediation strategies. Many positive suggestions have been made regarding improved tracks and engines for existing commuter trains, acoustically advanced railcar designs for the Green Line extension, etc. that we hope are taken seriously.

I-053-004

Finally, many of us feel that only with a working and effective Community Advisory Committee truly involved in all phases of the planning, contracting and construction phases of the Green Line extension can the needs of Somerville and Brickbottom residents be properly heard and incorporated. We hope this is seen not as intrusion into "experts' " territory but rather inclusion of essential locally-grounded expertise on the needs of the people the project is intended to serve and that will continue to live here long after the project is operational and the planners have moved on to other projects. Instead, decisions on station design and access, their connections to buses, pedestrians, cyclists and the Community Path extension will become more relevant and realistic.

Thank you for keeping the process open and inclusive; please continue to do so.

Sincerely,

Ramón Bueno

Ramón Bueno
1 Fitchburg St., B550
Somerville, MA 02143

I-053-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-053-002

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

I-053-003

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. An expanded analysis of potential noise and vibration impacts at the Brickbottom Artists Buildings is included in FEIR Chapter 8. These projections take into account the collective impacts of rail uses in the area. During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-053-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Natasha Burger [natasha.burger@gmail.com]
Sent: Friday, January 08, 2010 2:12 PM
To: Johnson, Holly S (ENV)
Subject: Public Comment on the Green Line DEIR, EEA #13886

Dear Secretary Bowles:

My name is Natasha Burger and I am a Somerville resident. I am writing to comment on the Green Line Draft Environmental Impact Report, EEA #13886. I respectfully request that my comments below be included in the public record.

I speak with Somerville Transportation Equity Partnership (STEP) and agree with their recommendations for the DEIR as outlined below.

Thank you for including in the public record my support of the project as outlined by STEP. I have highlighted in ***bold/italics*** my particular interests and concerns.

Natasha Burger
Somerville, MA

STEP urges strong and considerate support for the efforts of MassDOT to move the Green Line forward with the release of the Draft EIR. The state has committed over $1 billion to the Green Line Extension.

We support a continued "Green Light for the Green Line" AND proceeding with care.
We must "DO IT RIGHT" if this project is to sustainably serve the next three generations.

Somerville and its citizens applaud the release of the Green Line Extension DEIR and offer sincere thanks to MassDOT for committing to a Route 16 terminus, to full design of the Community Path, and to continued analysis of alternate locations for the maintenance and storage facility. The DEIR represents a critical milestone in the public evaluation process and allows for preliminary project engineering to begin. We appreciate the opportunity to comment on MassDOT's work thus far.

Station Design & Siting

I-054-001
- Green Line stations must connect as seamlessly as possible with all other clean modes of transportation, including current and re-routed buses. Station design should accommodate bus drop off and pick-up (for example, using bus pull-out pockets or curb extensions) with maximum integration of transit modes and minimal street disruption. Optimized bus routes connecting to Green Line stations should be implemented simultaneously with the start of Green Line service, as was done for the Red Line northwest extension.

I-054-002
- Station designs should allow for car drop off, but not parking, and present ease of pedestrian and bicycle access by locating station headhouses on major streets whenever possible, with station access from both sides of the street and in all directions of travel. Sidewalks leading to headhouses should be widened and additional crosswalks considered near stations. This will maximize transit use.
    - Mass DOT, working with community representatives should reconsider station designs to maximize ease of access particularly where riders will access stations at overpass bridges to maximize ease of access, efficiency and lower construction costs. Pedestrian and bus access to stations and high station visibility from major streets should be prioritized.

I-054-003
- Stations should provide adequate bicycle storage. This should be calculated based on a percentage of 3 to 5% of boardings at the stations. Bicycle storage should be sheltered from the elements, especially at Route 16, Lowell Street, and Union Square stations, to enable all-weather access.
- The Federal Transit Administration has issued a proposed change to bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The proposed policy states:

I-054-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-054-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. With the exception of replacing the existing parking at Lechmere Station, no station parking is planned at any of the proposed Green Line Extension stations. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-054-003

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the

- For purposes of determining whether a pedestrian or bicycle improvement has a physical or functional relationship to public transportation, regardless of whether it is funded as a capital project or public transportation enhancement, all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation. According to a test of activity and use, pedestrian and bicycle improvements beyond these threshold distances may be eligible for FTA funding if the improvement is within the distance most people can be expected to safely and conveniently walk or bicycle to use that particular transit service. Federal Register: November 13, 2009 (Volume 74, Number 216), http://edocket.access.gpo.gov/2009/E9-27240.htm.

I-054-004 • The new Green Line stations should be designed with elevators and should not include escalators, which are expensive to install and maintain. Wide staircases and ADA elevator access are sufficient. Reallocate the escalator budget for other station elements recommended in this letter.

I-054-005 • Constructing the new station platforms with ADA-compliant level boarding for low-floor Green Line cars that have sliding rather than accordion doors currently used on Green Line cars.

- System-wide accessibility should be the goal of the MBTA. To accomplish this the MBTA should replace accordion-style Green Line car doors with sliding doors that are compatible with level boarding. Raise all other station platforms in the Green Line system for level boarding, and order sliding doors in the new Type 9 rolling stock and retrofit all existing Green Line cars. This system-wide change would eliminate the need for time-consuming wheelchair ramps and mobile wheelchair lifts, while speeding up all passenger boarding.

I-054-006 • ***Station and station area designs must be developed through a formal and interactive community participation process to ensure that they fit into existing neighborhoods and support appropriate future mixed use development.*** Takings should be minimized to save the state money and to preserve land uses.

I-054-007 I-054-008 • Design for the relocated Lechmere Station should pay particular attention to the East Cambridge Planning Team's pedestrian-friendly area design ideas and old Lechmere Station re-use suggestions. The terminus at Route 16 should incorporate MGNA's ideas for minimizing takings.

I-054-009 • ***Station design and siting should involve active participation of knowledgeable transportation accessibility advocates to ensure accessibility requirements are adequately addressed.***

Community Path Integration & Preservation of Corridor Transit Potential

I-054-010 • ***Track design and construction should enable adding future stations between Lechmere and Washington Street / Union Square, between College Avenue and Route 16, and along a future Green Line extension to Porter Square that could serve both Cambridge and Somerville neighborhoods.***

I-054-011 • ***The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.***

Economic Development & Regional Corridor Planning

I-054-012 • Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a neighborhood and local business friendly surface boulevard that serves pedestrians and bicyclists as well as cars. Improved connectivity between both sides of Route 28 is crucial for economic development, pedestrian station access, and improved quality of life.

I-054-013 • State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts. Maintaining diversity in people and businesses while improving the natural environment is critical. Access to open space and greenery promotes health.

2

methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-054-004

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-054-005

The Green Line Extension Project is being designed for fully accessible stations in compliance with ADA requirements. However, the issue of systemwide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this Project.

I-054-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the

I-054-014 • The design and siting of the maintenance facility should not prevent development of a street grid in Inner Belt/Brick Bottom that enables access from North Point, McGrath-O'Brian Highway and Washington St.

Maintenance Facility & Regional Environmental Justice

I-054-015 • More detailed analysis of Mirror H, Option L and Option L alternative is necessary. The siting of the maintenance facility and storage yards should not increase the transportation infrastructure and environmental burdens in Somerville or interfere with proposed economic development in the Brickbottom Inner Belt area.

I-054-016 • Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston needs to be phased out and a new facility built south of Boston to eliminate the unsustainable and unjustifiable shuttling of trains through Cambridge.

Public Participation

I-054-017 • A project-wide Citizens Advisory Group should be maintained throughout detailed design, engineering, construction and start-up phases with smaller local advisory groups established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues.

I-054-018 • A procedure for determining remedies and/or compensation, incorporating community representation, should be required to handle instances when project mitigation proves insufficient to meet pre-agreed impact standards for noise, vibration, pollution and other environmental burdens.

I-054-019 • MEPA should require collaborative planning, with community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work our of a centrally located field office to maximize access.

Final Comments:
There has been considerable discussion about whether to accept the DEIR as a Final Environmental Impact Report (FEIR) or to require that it be treated as a DEIR and demand that changes be made in a subsequent FEIR.

To avoid the significant delay that a separate FEIR would entail, the most critical issues with the DEIR could either be addressed in a Supplemental EIR, or in Addenda to the FEIR. These issues include:

I-054-020 • ***Eliminate the Yard 8 Option for the Maintenance Facility and require a full analysis of Scheme L and the alternate Scheme L designs.***

I-054-021 • ***Commit to a collaborative public process for the next phase that would provide oversight and station area participation and develop a process for addressing mitigation concerns.***

I-054-022 • ***Integrate the Community Path into the design, planning and funding of the Green Line extension.***

I-054-023 • ***Coordinate the Green Line extension with calming of the McGrath/O'Brien Highway in Cambridge & Somerville.***

I-054-024 • ***Designing and constructing the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project.***

Project.DEIR/EA Section 5.3 describes the Project's potential temporary and permanent acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-054-007

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-054-008

Various community groups have suggested modified concepts for the Mystic Valley Parkway/Route 16 Station. Preliminary evaluation of these concepts showed that the cost of constructing the Green Line Extension to Mystic Valley Parkway/Route 16 would not be reduced sufficiently to be able to be funded at this time. Additional evaluation of the concept as it relates to the MBTA's design standards, operations and other requirements would be necessary in order to determine the full cost savings of a redesigned station. While MassDOT has not been required to revisit the design of this station as part of the FEIR document, further evaluations may consider the redesign options presented by the MGNA in future analyses.

I-054-009

The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement as the station designs are refined. Coordination with local, state, and federal accessibility groups will continue as the Project advances into preliminary engineering.

I-054-010

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-054-011

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-054-012

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-054-013

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-054-014

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-054-015

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's

preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-054-016

Major modifications to operations of the Boston Engine Terminal (BET), MBTA Commuter Rail and other railroads, and railroad vehicles are beyond the scope of the Green Line Extension Project.

I-054-017

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. The workshops will be organized around facility locations or groups of locations. All will be well-advertised, open to the public and in accessible venues.

I-054-018

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-054-019

Please see response to Comment I-054-018.

I-054-020

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-054-021

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-054-022

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-054-023

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-054-024

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

HS

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
NOV 6 – 2009
MEPA

Re: DEIR for the Green Line Extension

Dear Secretary Bowles,

I-055-001

I strongly support the proposed project but feel that a **key shortcoming is the lack of a connection to the red line**. This could be accomplished by extending beyond the proposed Union Square station along the Fitchburg Line right of way to Porter Square.

The following is an exerpt from the Urban Ring study:

1.2.3.2 Inner Core Rapid Transit Congestion Remains a Problem
The high reliance on the radial transit network and the large number of Urban Ring trips that pass through the Boston Inner Core adds to the growing levels of congestion on the central portions of the MBTA rail network. Capacity problems currently exist on the Blue Line and the western leg of the Green Line. Improvements in the central subway system as part of the Long-Range Regional Transportation Plan will provide some additional capacity. However, these improvements only marginally increase Core capacity and do not address a major cause for the congestion – namely a system configuration that forces many transit users to pass through the Inner Core to reach destinations along the Urban Ring Corridor. The rapidly increasing demand placed on the system by this pass-through transit traffic is expected to consume the planned new capacity in the central subway system, particularly on the Green Line.

The proposed green line extension will add additional trips to the already overloaded inner core. With a connection to the red line west of Harvard Square, distribution of added trips between these two lines can take place other than through downtown Boston.

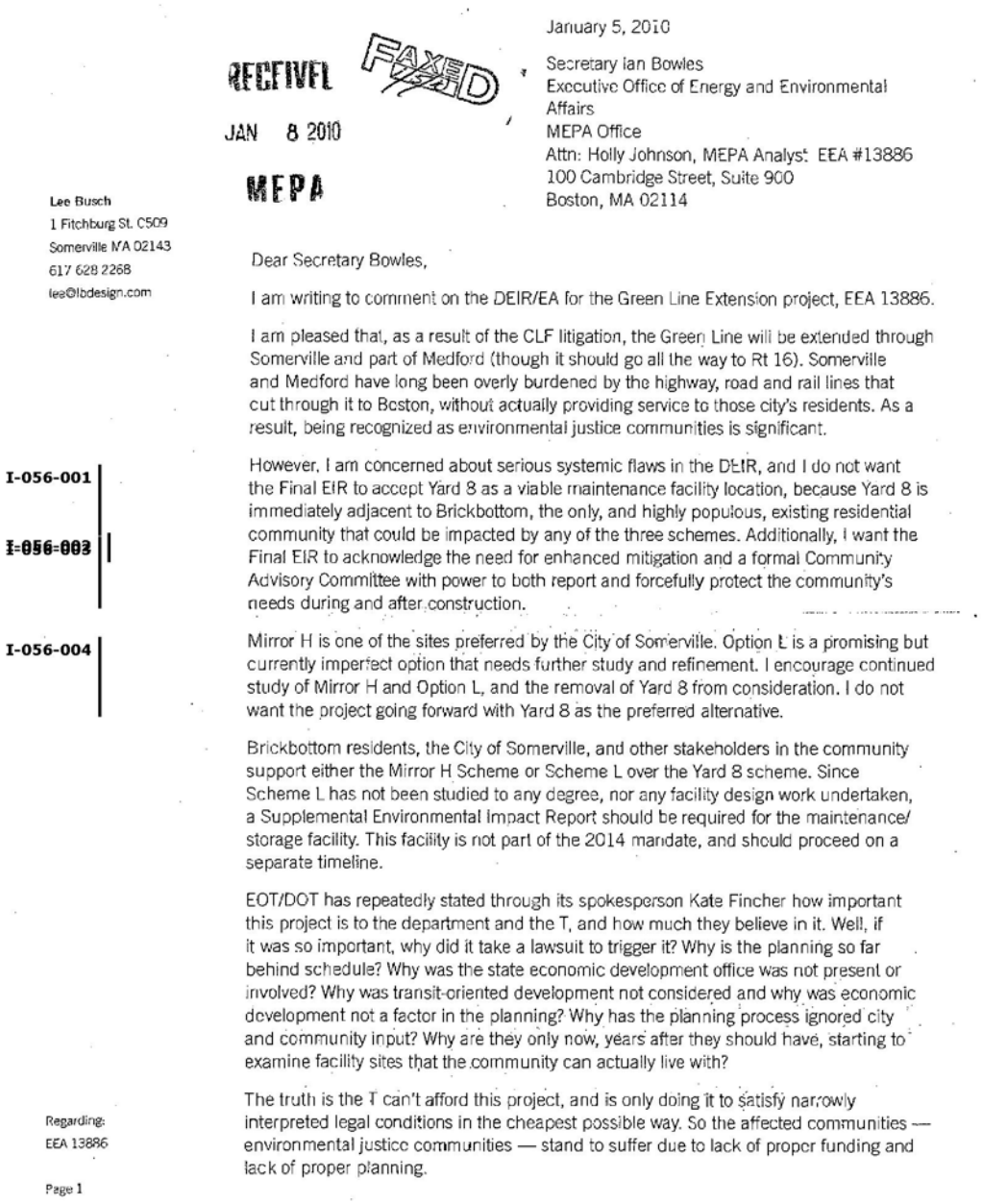
Sincerely,

Donald Burgess

Donald Burgess

I-055-001

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.



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January 5, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

Dear Secretary Bowles,

I am writing to comment on the DEIR/EA for the Green Line Extension project, EEA 13886.

I am pleased that, as a result of the CLF litigation, the Green Line will be extended through Somerville and part of Medford (though it should go all the way to Rt 16). Somerville and Medford have long been overly burdened by the highway, road and rail lines that cut through it to Boston, without actually providing service to those city's residents. As a result, being recognized as environmental justice communities is significant.

I-056-001

However, I am concerned about serious systemic flaws in the DEIR, and I do not want the Final EIR to accept Yard 8 as a viable maintenance facility location, because Yard 8 is immediately adjacent to Brickbottom, the only, and highly populous, existing residential community that could be impacted by any of the three schemes. Additionally, I want the Final EIR to acknowledge the need for enhanced mitigation and a formal Community Advisory Committee with power to both report and forcefully protect the community's needs during and after construction.

I-056-003

I-056-004

Mirror H is one of the sites preferred by the City of Somerville. Option L is a promising but currently imperfect option that needs further study and refinement. I encourage continued study of Mirror H and Option L, and the removal of Yard 8 from consideration. I do not want the project going forward with Yard 8 as the preferred alternative.

Brickbottom residents, the City of Somerville, and other stakeholders in the community support either the Mirror H Scheme or Scheme L over the Yard 8 scheme. Since Scheme L has not been studied to any degree, nor any facility design work undertaken, a Supplemental Environmental Impact Report should be required for the maintenance/ storage facility. This facility is not part of the 2014 mandate, and should proceed on a separate timeline.

EOT/DOT has repeatedly stated through its spokesperson Kate Fincher how important this project is to the department and the T, and how much they believe in it. Well, if it was so important, why did it take a lawsuit to trigger it? Why is the planning so far behind schedule? Why was the state economic development office was not present or involved? Why was transit-oriented development not considered and why was economic development not a factor in the planning? Why has the planning process ignored city and community input? Why are they only now, years after they should have, starting to examine facility sites that the community can actually live with?

The truth is the T can't afford this project, and is only doing it to satisfy narrowly interpreted legal conditions in the cheapest possible way. So the affected communities — environmental justice communities — stand to suffer due to lack of proper funding and lack of proper planning.

Regarding:
EEA 13886

Page 1

I-056-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-056-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. Mitigation measures for the College Avenue and Lechmere Stations are further described in FEIR Chapters 4 and 5, respectively. The mitigation measures required by the Certificate are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-056-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-056-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three

DOT, the T, and state government need to find the money to execute this project properly, or it will not bring either the environmental, the quality-of-life or the economic benefits it should.

As part of this poor planning, the imperfect station locations will increase road traffic and emissions rather than reduce them, and the flawed plan to terminate the extension at College Ave — at the heart of a university campus — will create traffic havoc at a busy intersection that already cannot handle the peak auto and pedestrian traffic it suffers under now. If the T wants to maximize ridership, which will increase revenues and help reduce emissions, the station siting and access needs to be more carefully planned, and the community path needs to be integrated into the entire design, and built at the same time.

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

However, my letter will not focus on station locations or the flawed terminus plan — I'm sure other constituents will cover that. My focus is on the maintenance facility and storage yard location, because I am a longtime resident and owner at Brickbottom.

The Green Line extension to Somerville and Medford is a legal obligation of the Commonwealth of Massachusetts, agreed to in 1991 as mitigation for impact of the Big Dig highway construction project. **In my opinion, the current DEIR does not serve the original goals or the legal mandates.**

Somerville is an environmental justice community, and as such, should have a say in the project. To date, both Somerville's stated goals and actual needs have been ignored.

I-056-005

This project is about environmental justice, not T operations — it exists because of a mandated and legal need for environmental justice. The siting and design of stations, and the preferred location of the storage yard and maintenance facility demonstrates a fundamental lack of concern for environmental justice on the part of the EOT.

T operations have been prioritized too far above community needs.

The EOT/DOT has forgotten that this project serves environmental justice, not the needs of the T. The needs of the T should be subordinate to serving and satisfying the legal obligations the Commonwealth of Massachusetts, agreed to in 1991 as mitigation for impact of the Big Dig highway construction project.

In order to be accepted as an FEIR, the DEIR must provide a "reasonably complete and stand-alone description and analysis of the project, project alternatives and environmental impacts, and adequately address mitigation." Yet despite being filed 10.5 months after the Dec. 1, 2008 deadline, the DEIR is materially deficient in almost every category.

I need to state for the record that this entire process has been flawed from the beginning. The community engagement consisted EOT spokespeople bringing scrubbed and simplified presentations to stakeholder groups with a brief question and answer period afterwards. And the "answers", most of the time were "we'll deal with that after the project is approved, because we're only doing 10% of the design now." I know because I attended nearly all of these meetings.

The process to date is and has always been completely unacceptable. There was no real dialogue. It was clear to me the meetings were held because they were mandated, not because the EOT was interested in what residents had to say. If the EOT/DOT had actually been listening, they would know that the Yard 8 plan, and the plan to terminate the extension at College Ave, are both completely against the wishes of every neighborhood community and city government involved.

maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-056-005

The Project's Purpose and Need is described in DEIR/EA Chapter 2, Purpose and Need. The Project is needed to comply with the State Implementation Plan (SIP), which includes requirements for this Project as well as other transit projects to meet the air quality and transit commitments established as a result of the Central Artery/Tunnel project.

The EOT informed us in only the most cursory way, with little to no background information about how decisions were made, or how alternatives were examined or rated.

Instead, dedicated groups of citizens in all affected communities have come together and taught themselves about civil engineering and planning, or involved experts at their own expense. This has taken time, money and energy, and we have valuable input to provide, but there is no provision in the process for us to help improve the plan.

This project is supposed to strengthen communities, promote growth, and answer longstanding environmental justice issues — it should not further burden the communities it is supposed to be helping.

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

I-056-006

Regarding Community Involvement:

- I request that a citizen advisory committee (CAC) be established to oversee the rest of the project and to ensure that the community has a voice in the process.
- The formulation of a CAC is part of an optional MEPA Special Review Process (Regulation 301 CMR 00 MEPA which is cited on the MEPA website.) Adoption of MEPA Regulations calls for a special review process based on a citizen advisory committee (CAC) that is enabled to review the project, address community concerns, drive issue redress and implement remedies through the entire process.

I-056-007

- The CAC should be empowered to review every contract in the bid process to confirm that proper and agreed to mitigation language is included before contracts related to the project are awarded.

Regarding Maintenance Facility Requirements:

I-056-008

Regardless of the final choice of site, a maintenance facility and storage yard should adhere to the following guidelines:

- Consolidate location near to existing rail uses: reconfigure and reuse BET land (43 acre commuter rail maintenance facility) where possible and consolidate other MBTA land uses in Inner Belt area
- Minimize any adverse impact on economic development and neighborhood connectivity
- Plan site in conjunction with comprehensive land use and economic development planning
- Minimize the site's footprint: don't include a separate employee parking lot for MBTA workers when an existing one can be shared; minimize on-site lots; look to share lots with other facilities; only include car storage required for the Green Line Extension itself. System-wide storage needs should be evaluated system-wide and not be part of this project.
- Enclosing and covering the storage yard is essential to mitigate its impact on abutters
- Choose forward-thinking planning and design for the facility and storage yard that will blend with future mixed-use development, not the area's current industrial character.
- Rail traffic patterns, including switching and reversal of cars, as well as curvature in the railway tracks, should be carefully evaluated and planned to minimize noise and

I-056-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-056-007

Please see response to Comment I-056-006.

I-056-008

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-056-008

vibration impacts on nearby residences. Current designs and plans have been proven to be flawed by outside (community-sourced) consultants

- I request that the project not go to a Final EIR in regards to the maintenance facility.
- It is entirely possible to decouple the Green Line Extension planning and design from the maintenance and storage facility because the facility is not part of the mandated 2014 Green Line Extension completion deadline.

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

Why I Oppose "Yard 8":

- It will take 11.5 acres of land from the city of Somerville, much of it privately held, land that is already permitted and zoned for development, and remove it from the city's commercial tax base.
- It creates a permanent barrier to neighborhood cohesion by dissecting the Inner Belt from the Brickbottom area, creating a barrier to future economic development that will last for generations to come.
- It derails future development potential our neighborhood, which is one of the last remaining areas developable land in Somerville
- It creates a second distinct rail maintenance facility in a small area of Somerville
- It will result in significant loss of future tax revenue for the city of Somerville
- It will have a direct adverse impact on adjacent property value
- It abuts and impacts the only residential building in the area that serves as home and work space for 220 people
- Since it was first proposed, Yard 8 has been opposed by the City of Somerville, community groups, and residents. At the recent DEIR public and hearing and meeting on maintenance facility alternatives held at the Cambridge Multicultural Arts Center on December 16th, with Cambridge, Somerville and Medford residents in attendance, opposition to Yard 8 was unanimous.
- Brickbottom is a diverse community of 220 residents — many of whom both work and live in the building. For these residents, there will be no escaping the impact of the Yard 8 facility and storage yard and the green line. We will become locked in our homes, with air tight windows, without air conditioning in most units, unable to go outside or get away from the sound. This future is unjust and does not live up to the standards that Mass DOT has promised to deliver.
- The Secretary's Certificate (EENF, *Environmental Justice*, p. 7) states "no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts." While we accept the value of the Green Line extension, the added burden of a maintenance and storage facility operating 24 hours a day constitutes a disproportionate burden of environmental impact on the quality of life for Brickbottom's 220 residents, including noise, vibration, light and air quality.
- Asking the Brickbottom area of Somerville to absorb all of the sound from a commuter line, two freight lines, two MBTA-lines and the maintenance facility and storage yard is unjust.

I-056-009

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-056-010

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-056-011

MassDOT will comply with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

As presented in DEIR/EA Chapter 6, it is anticipated that the Green Line Extension will have a positive impact on outdoor air quality within the study area. Modifications to MBTA Commuter Rail equipment are outside the scope of this project. However, new fuel standards from EPA will result in lower emissions from locomotives, automobiles, and buses.

- The project's Citizen's Advisory Group was not involved in evaluating potential sites for the maintenance facility and storage yard. Additionally, mandated land use planning was not performed. This violates the Secretary's Certificate for community involvement in the project. (EENF, *Smart Growth/Land Use*, p. 5)
- If Yard 8 is not used for the Maintenance facility, moving the Green Line Extension tracks farther away from Brickbottom should be investigated. Even a few feet's distance will make a big difference as far as noise and vibration impacts.

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

Why I like "OPTION L" and want it improved

- Option L is a promising compromise location. Its specifics need to be further studied, in conjunction with the 2010 Somerville master planning process for the Brickbottom/Inner Belt area.
- There are areas in which Option L can be improved: minimize parking; share parking facilities with BET; move storage farther away from residences; minimize the amount of train storage required; reduce track curvature and western end (closest to Brickbottom)
- Work to consolidate with the BET commuter rail maintenance facility and other rail uses in the area wherever possible to minimize the footprint required.
- The amount of parking in the current Option L plan pushes the train storage closer to Brickbottom and forces a severe curve in the lead track. We believe that reconfiguring the parking and train storage would significantly reduce the impacts on all abutters.

Regarding Mitigation:

I-056-009

- The DEIR mitigation measures are often described with caveats such as "to the extent practicable" and "where feasible." Before construction begins, the EOT should be required to enter into written agreements with each affected city, defining the mitigation obligations and deadlines for fulfillment. As part of that, we need 24-hour availability to deal with construction impacts.
- Mitigation discussion in the DEIR is both vague and insufficient. DEIR Section 5.4.7-3 *Noise Mitigation*, p. 5-118, states: "At some locations projected to be exposed to noise impact, noise barriers may not be a feasible or effective means of mitigation" yet only 40 residences in Brickbottom are designated for soundproofing. Brickbottom has 155 residences.

I-056-010

- Additional mitigation measures must be specified, including **new windows for ALL of Brickbottom**, which will be surrounded on three sides by 20- to 24-hour-a-day activity, not just the insulting 40 windows currently in the draft which would represent less than 3% of windows in the complex.

I-056-011

- Retrofitting the existing commuter rail diesel locomotives with noise- and emission-reduction devices would also help satisfy the intent of the project and help to mitigate longstanding noise and air-quality impacts that residents have lived with for decades.

I-056-012

- The DEIR further states (Section 6.5.4-1 *Environmental Justice*, p. 6-7): "The proposed maintenance facility site is located in an existing industrial area next to the MBTA Fitchburg and Lowell Lines. There would be no moderate or severe impacts from noise

Regarding EEA 13866

I-056-012

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

I-056-012

after mitigation was implemented. Therefore, there would be no disproportionate noise impacts to environmental justice populations from the proposed maintenance facility." This language is misleading, disingenuous, and contrary to the report's own findings.

I-056-013

- MBTA policy is to commit at least 2% of project cost to noise mitigation. With an overall cost estimate of $1 billion, the Green Line noise mitigation commitment should be at least $20 million; the DEIR estimates only $15.8 million.

I-056-014

Lee Losch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

- The DEIR focuses on mitigation for indoor spaces at Brickbottom, based on changes to the building's exterior. However, outdoor mitigation is also needed, including the only outdoor green space in the area, the award-winning Brickbottom Courtyard, which will be severely impacted by noise and vibration. The courtyard is open at both ends from the North and South and will reverberate with noise from both the proposed Yard 8 maintenance and storage facility and from both sides of the Green line. We encourage additional study of outdoor mitigation, including barriers.

I-056-015

- There needs to be a process in place to address mitigation problems during construction and after the fact; there must be a way for residents to seek redress if specific goals are not met.
- Mitigation, especially mitigation for noise and vibration, must be in place **before** construction begins and measures to avoid or eliminate these impacts should be identified and implemented.

I-056-016

- With the introduction of the Green Line Extension, Residents of the Brickbottom Artists Building (a community whose development has anchored and encouraged economic development in its neighborhood) will live in perpetuity with two Green Line spurs on either side of the building. Many Brickbottom residents will co-exist with the Green Line just 19 feet away. This proximity needs to be acknowledged, investigated to see if it is necessary, and be redressed and thoroughly remediated.

I-056-017

- The railroad tracks on the South side of the Brickbottom Building are already noisy due to commuter train traffic on the Fitchburg Line and large Amtrak engines, freight trains and commuter trains that idle on the dead-end railhead. The collective noise of the commuter rail, the dead-end rail head and the projected Union Square spur need to be measured and calculated to assess required noise and vibration mitigation to properly assess the added noise and vibration introduced by the Union Square Spur.

I-056-018

- In light of the overall environmental impact of the Green Line and its contribution to the existing environmental impacts of the commuter and freight rail traffic near Brickbottom, we request that MassDOT assign five of the new EPA Level 3 diesel rail engines to the Fitchburg Line to help mitigate the overall environmental impact of existing and new rail traffic in this area. The Fitchburg Line should be prioritized for the replacement of legacy diesel engines.

I-056-019

- One of the greatest sources of noise in the system is the air conditioning of the light rail cars. We request that fan-quieting mitigation* be implemented on cars stored and used on the Green Line Extension. This can be accomplished by installation of quiet, efficient fans, several new designs are available. Placement of fans on the vehicle can make a significant difference in the noise radiated toward residents closest to the tracks, especially, on the Union Square spur.

Regarding:
I-056-020

- Additionally, Green Line railcars should be fitted with acoustical absorption* under the cars. This has been demonstrated to provide up to 5 decibels of mitigation for wheel/rail noise. Similarly, vehicle skirts* over the wheels can provide 5 decibels of mitigation. By

I-056-013

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-056-014

See response to Comments I-056-012 and I-056-013.

I-056-015

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

I-056-016

The precise alignment for the Green line Extension tracks near the Brickbottom Artists Building and neighboring structures will be determined during preliminary engineering and final design. The Medford Branch tracks will be located as far from the building as possible, with a minimum clearance between building and tracks of about 15 feet. The Fitchburg Branch will be further from the building, with a minimum clearance between building and tracks of about 25 feet.

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures.

I-056-020 | carrying their own noise barriers, vehicles with these features can provide cost-effective noise reduction.

I-056-021 | • MassDOT should clearly define procedures for further mitigation if stated noise and vibration targets are not reached. Additionally, a procedure for determining compensation, incorporating community representation, should be included for instances where mitigation proves insufficient.

These recommendations are included in the 2006 Transit Noise and Vibration Impact Assessment, done by the Federal government. This same document was cited in the DEIR.

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

Regarding the Community Path

I-056-022 | • As currently designed, Brickbottom will only have access to the community path at Washington St. We must have more direct access to it.

I-056-023 | • The Community Path should be designed and built in conjunction with the Green Line Extension.

• The entire project needs clear Community Path and Bicycle Connections. In order to ensure direct connections at each station and a safe, attractive, and highly-functional Path, and to increase ridership to improve air quality and revenue, both projects should be designed and constructed simultaneously.

Regarding the Brickbottom/Washington St. Station

I-056-024 | • It is currently sited just south of Washington St, it should be directly at Washington St to better connect to East Somerville neighborhoods.

• It should have access from both sides of Washington St.

• It should not have a kiss and ride

• It should directly connect to bus stops

I-056-025 | • It, like all proposed stations, needs more bicycle storage

I-056-026 | • The extension should be designed so that it doesn't preclude the possibility of future stations between Lechmere Station and Washington St on the main line or between Lechmere and Union Sq on the spur

Regarding Land Takings

I-056-027 | A strip of land on the south side of Brickbottom is listed as one of the land takings for the project. How much land will be taken? This has not been clarified in the DEIR and has the potential to significantly impact the Brickbottom community.

The mitigation measures required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-056-017

Please see response to Comment I-056-13.

I-056-018

EPA Level 3 locomotives adhere to more stringent air emission requirements but do not have lower noise emission requirements. As presented in DEIR/EA Chapter 6, it is anticipated that the Green Line Extension will have a positive impact on outdoor air quality within the study area. Modifications to MBTA Commuter Rail equipment are outside the scope of the Project. However, new fuel standards from EPA will result in lower emissions from locomotives, automobiles, and buses. FEIR Chapter 8 details the Project's proposed mitigation measures.

I-056-019

While noise from fans in auxiliary equipment such as air-conditioners on transit cars is a significant noise source for stationary trains, the greatest source of noise on moving trains is generated at the wheel-rail interface. Installing quieter fans could be effective in reducing noise emissions from Green Line cars while stationary, such as when they are in the maintenance yard being prepared for revenue service. However, this mitigation measure would not be effective in reducing the noise generated by moving Green Line cars or the total noise generated by both Green Line and commuter trains. Noise barriers proposed for the Project would be more effective in reducing the noise from both Green Line and commuter trains.

Specific modifications to existing Green Line vehicles would be a systemwide effort and may be beyond the scope of the Project. As

I-056-028

Lee Busch
1 Fitchburg St. C509
Somerville MA 02143
617 628 2268
lee@lbdesign.com

Conclusion

Yard 8 should not be considered. **Yard 8 should be a non-starter.**

The entire DEIR study and public engagement process has been flawed. The DEIR cannot be taken at face value without significant evaluation in light of intense public outcry and public-sourced study and comment.

The DEIR should be evaluated against the principles set forth in the CLF lawsuit and the agreement, not the T's operational needs. **This is the citizens' project, not the T's project.**

The MEPA certificate should require DOT to enter into written agreements with the cities of Medford, Somerville and Cambridge regarding **mitigation commitments** to each community.

The MEPA certificate should **require a public process framework** for the remainder of the project that will ensure collaboration with the community and local governments to set project mitigation standards and remedies, to accomplish better station and area designs and minimize environmental impacts.

The maintenance and storage facility locations and designs require **thorough scrutiny and reevaluation** with respect given and attention paid to the intense public outcry and public-sourced study and comment. The proposed locations and plans must not be taken at face value.

The new Massachusetts Department of Transportation is committed to make "investments and decisions that strengthen communities, support economic growth and improve public health." Please be mindful of the state's mandate in carrying our your duties.

Most sincerely,

Lee F Busch

Regarding:
EEA 13886

Page 8

described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes proposed mitigation measures and next steps pertaining to mitigation.

I-056-020

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-056-021

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-056-022

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community

Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-056-023

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-056-024

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-056-025

The amount of bicycle storage at each station is based on ridership

projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-056-026

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-056-027

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-056-028

MassDOT has noted and considered your comments. Thank you for your interest in the Green Line Extension Project.

Johnson, Holly (EEA)

From: sam [samanthacbutler@yahoo.com]
Sent: Tuesday, December 29, 2009 5:49 PM
To: Fichter, Katherine (DOT); Johnson, Holly S (ENV)
Subject: Green Line to Rt. 16, EEA #13886

Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I-057-001

I am writing because I feel it is very important that MassDOT construct the Preferred, Full-Build Alternative for the
Green Line extension to Medford with a terminus station at Route 16 in one phase by Dec. 31, 2014.

I am a resident of Medford. My husband and I purchased our house 3 years ago assuming the Green line extension would run to Rt. 16, which is near our home. I am sure you can imagine the convince to us of green line access near our home. I would be so lovely for us to take the greenline into Boston or even to run errands around Medford and Somerville. In addition, this extension to Rt. 16 will serve the most people and encourage more people to ride the MBTA rather than drive, thus freeing up traffic and parking issues. Encouragement of subway commuting will provide the most and best environmental benefits for Medford, Somerville, and Arlington.

Therefore, in order to achieve the maximum environmental and community benefits of the project the project should extend the green line to Rt 16 by 2014 and not wait for a second round of construction. In other words, the Draft Environmental Impact Report should not be accepted as the Final Environmental Impact Report.

Please consider the residence of Medford and how long we have waited for this green line extension.

Samantha Butler
resident of Medford, MA

I-057-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Charles W. Cameron 1 Fitchburg St C-504 Somerville, MA cwc@designdetails.com

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson MEPA Analyst
EEA #13886
100 Cambridge St. Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Ian Bowles,
Many of my neighbors have written to you regarding Project Number EEA #13886 encouraging you to explore alternatives to the siting of the Green Line Maintenance Facility at Yard 8. I would like to add my voice to theirs and express my concerns.

Public transportation has the potential to improve the mobility and quality of life of many people who would otherwise be restricted to their own neighborhoods but the way it is implemented has the potential to cause inconvenience, health hazards, property damage and economic hardship for many others.

I-058-001

The siting of the Green Line Maintenance Facility at Yard 8 would negate the efforts of the Brickbottom community to develop that area of Somerville into a viable area suitable for residential habitation. It would effectively throw a disproportionate burden on the City of Somerville by reducing its tax base and preventing the improvement of large areas of land which are now occupied by tow lots and parking yards for trucks and busses.

It is ironic that even though state agencies have allotted a T stop to Brickbottom, the placement of a monumentally disruptive 24 hour industrial facility directly adjacent to the areas largest residential development will negate the reason for its existence by driving out the people who would benefit from it. Taxpayers do not want to live in the kind of area that the Maintenance Facility would create. If the yard 8 site is approved it will assure the demise of any community that might develop around Brickbottom. Truck & bus drivers, sanitation workers, utility workers & cab drivers will continue to use the area but they have little need of a T stop.

Mitigation is surely a euphemism. Short of building entirely underground there is no possible way to mitigate the unconscionable location of the Maintenance Facility practically on top of a 220 person residential development. Residents are already aware of the destructive quality of trains and large vehicles; and any rhetoric addressing "mitigation" is patently absurd. The only equitable mitigation would be for the state to buy out the residential owners at their market value and rezone the building for industrial use. That would at least settle the matter of the future of that area of Somerville.

I've been an urban pioneer for the last 35 years, being forced out of neighborhoods as they improved beyond my renter's price range. Brickbottom was an opportunity for permanent settlement and I've put 20 years of hard work into improving a building that was only a shell when I came here, all the time hoping that my efforts and those of my dedicated neighbors would result in making this corner of the city a desirable location. We've suffered through rude and dangerous tow truck drivers, triple parked trash vehicles, piercing back-up alarms, and a never-ending stream of blowing trash and illegal dumping. Will this area realize its potential as a place people will someday want to come? If the Green Line Maintenance and Storage Facility is located at Yard 8 it will not.

Sincerely,

Charles W. Cameron

I-058-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: roberta cameron [rcameron@gmail.com]
Sent: Friday, January 08, 2010 1:24 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Project

Dear EOEA,

I am writing about the Green Line Extension project. As a resident of the Medford Hillside neighborhood, I am deeply concerned that this project should be completed to its final extent, with a terminus at Route 16. With over 200,000 square feet of existing and/or redevelopable commercial space, two affordable multifamily developments immediately adjacent to the site, and additional high density affordable housing and a public school within a half mile, this location offers the greatest pedestrian accessibility to potential riders from several communities. Moreover, the location at Route 16, Boston Ave, and North Street, along the Mystic River, and less than mile from the West Medford commuter rail station provides more alternatives for passengers using various modes of transportation to arrive at the train station, while reducing over all car trips. The DEIR notes that this location has high potential for Transit Oriented Development. For these reasons, the Mystic Valley Parkway terminus station with no parking was determined to be the Preferred Alternative.

I-059-001 The Draft EIR unfairly describes the impacts of the Route 16 station assuming worst case displacement of commercial properties which can be avoided through alternative station design. A best case scenario for the Route 16 station, minimizing impacts and costs, and fully representing the bicycle and pedestrian accommodations should be presented in a Final EIR, and the funding for completion of the entire project should be dedicated in one phase. Completing the extension to Route 16 in a single phase by Dec. 31, 2014 will maximize the benefits of the project, alleviate impacts, significantly minimize costs, and increase the competitiveness of the project for Federal funding. Moreover, the additional cost and review project necessary for completing the project in two phases makes it unlikely that the second phase will be feasible.

I-059-002 Given the uncertainty of completion of a future phase, the Draft EIR does not adequately evaluate the detrimental effects on the Hillside neighborhood from a College Avenue terminus, rather than a through station. Traffic between Route 16/North Street and the proposed College Avenue terminus is already challenging because of the limitations of the roads in the Winthrop Street vicinity combined with the commercial activity on Boston Avenue which lacks off-road space for parking or loading. A College Ave terminus could have severe traffic impacts from people driving to the terminus, affecting Medford Hillside residents disproportionately without improving our transit access. By contrast, a terminus at Route 16 would alleviate the current traffic conditions and will do more to reduce auto trips in our neighborhood.

I-059-003 I feel that The Secretary of Environmental Affairs should require MassDOT to continue the Environmental Impact analysis in the form of a Final Environmental Impact Report that fully evaluates the completion of the project versus the full cost and impact of delaying completion or stopping short.

Sincerely,

Roberta Cameron, AICP

resident of 12 North Street, Medford, MA

1

I-059-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-059-002

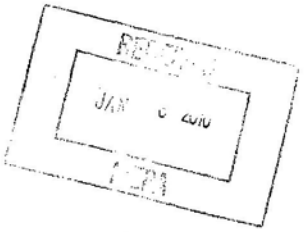
In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-059-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

#5

Irving S. Camiel
Lawrence E. Johnson
1 Fitchburg Street
C411
Somerville, MA



The Executive Office of Energy & Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge Street, Suite 900
Boston, MA02114

January 4, 2010

We are writing in regards to Project Number EEA#13886.
We are residents of The Brickbottom Artists Building at 1 Fitchburg Street, Somerville, MA, and we are very concerned about the noise, vibration levels, and overall negative impact of the storage yard on the quality of life here at Brickbottom.
I-060-001 We are in support of The Green Line Extension, and feel that progress is always a good thing, but we are concerned that the Train Storage Yard and Maintenance Facilty will add an unjust burden to The Brickbottom Residential District, and to Somerville.
We appreciate your continued thoughtful consideration of alternatives to Yard 8.

Sincerely,

Irving S. Camiel
Lawrence E. Johnson

I-060-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Lana Dvorkin-Camiel [calendula28@yahoo.com]
Sent: Tuesday, January 05, 2010 10:49 PM
To: Johnson, Holly S (ENV)
Cc: brickbottommgr@earthlink.net; Lana; Stuart Camiel
Subject: Comments About DEIR - Project EFA#13886

January 5, 2010

Stuart and Lana Camiel
The Brickbottom Artists Building
1 Fitchburg Street #B453
Somerville MA 02143

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

We are writing in regards to the Draft Environmental Impact Report (DEIR) on project Number EEA#13886. First of all, we would like to express our support for the Green Line Extension, and our gratitude to you for allowing citizens of Somerville, Cambridge and Medford to voice their concerns about recently released DEIR, and for looking for alternatives (such as Mirror Scheme H and Option L) to placement of maintenance facility and storage yard.

Our family has been living and enjoying the Brickbottom community for the past 10 years. We are very concerned about the community's well-being if Yard 8 is ever used for building a maintenance facility and storage yard.

For the last several years our small business has been housed in our unit. As business owners and residents, it would be absolutely devastating to us to have a continuous noise and vibration pollution. If the maintenance facility and storage yard are placed next door, we will be forced to move at least the business. We know that many of our neighbors would have to start looking for ways to move their successful businesses and residences as well. The city of Somerville will lose revenue from these businesses. Lack of the Innerbelt area economic development will compound the problem further.

I-061-001

We would like to encourage you to continue investigating alternate sites for the project and completely remove Yard 8 from the list of sites discussed. Currently, there are 220 residents, many of whom live and work in the Brickbottom Artists Building full-time. This community serves as an amazing example of wise investment by a group of artists. We continuously try to improve our neighborhood through many projects and active participation in the life of Somerville and, of course, by offering numerous shows and special events. Our community is praised by many colleagues, friends, media and politicians. We are hopeful that you will help us to preserve our quality of life and work.

Sincerely,

1

I-061-001

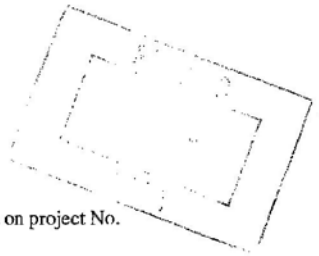
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Stuart and Lana Camiel

#3

James T. Campen
17 Kelly Road
Cambridge MA 02139

The Executive Office of Energy and Environmental Affrirs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA#13886
100 Cambridge Street, Suite 900
Boston MA 02114



Dear Secretary Bowls:

I am writing in regard to the Draft Environmental Impact Report on project No. EEA#13886.

I-062-001 | Although I reside in Cambridge, I am a property owner at the Brickbottom Artists Building in Somerville where my wife has a studio.. The detailed evaluation of alternative sites for the Green Line maintenance facility and train storage yard has shown three options. Of the three proposed sites, Mirror H. is the most preferable. This is the preferred site of the City of Somerville and the residents of the Brickbottom Artists Building. Option L will need further study and refinement, but might work.

I-062-002 | I strongly oppose siting the Green Line Train Storage Yard and Maintenance Facility in Yard 8. This site is immediately adjacent to the Brickbottom Building, with 220 residents, and would have serious negative effects on their quality of life. I am particularly concerned about the noise and vibration levels as it impacts our building and surrounding businesses

In addition to noise and vibration concerns, the Yard 8 location would build a barrier between the Inner Belt and the Brickbottom areas and would impact the potential for future development in the region. The Storage Yard and Maintenance Facility would have a direct impact on future tax revenue as it impacts adjacent property value and future growth.

I-062-003 | I support the Green Line Extension and hope to see continued community involvement as plans proceed. In this spirit, I am voicing my strong objections to the Yard 8 site for the Storage Yard and Maintenance Facility. The Yard 8 location would unjustly punish the residents of Brickbottom and does not live up to the standards that Mass DOT has promised to deliver.

Thanking you in advance for your consideration.

Sincerely yours,

James T. Campen

I-062-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-062-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration.

I-062-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Doug Carr [dcarr@cube3studio.com]
Sent: Thursday, January 07, 2010 1:14 PM
To: Johnson, Holly S (ENV)
Cc: Doug Carr; donnadougcarr@comcast.net
Subject: DEIR Comment letter - Green Line Extension Project EA #13886
Attachments: DEIR Comment Letter_010710.pdf

Ms. Holley Johnson:

Attached above as a PDF is my two-page comment letter for the DEIR for the Green Line Extension Project to Cambridge, Somerville and Medford, EEA #13886.

Thank you for coordinating these comments.

Regards,

Doug Carr
Project Manager

CUBE 3 Studio LLC
architecture • interiors • planning

360 Merrimack Street
Building 5, Floor 3
Lawrence, MA 01843

Main: 978.989.9900
Direct: 978.379.8726
Fax: 978.379.8755 Direct
Cell: 781.526.7405
Web: www.cube3studio.com

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January 07, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Via email: Holly.S.Johnson@state.ma.us

Dear Secretary Bowles:

I-063-001 I am a near-lifelong resident of Medford writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Cambridge, Somerville and Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. I ask that you reject the DEIR as written because it does not comply with the December 1, 2006 MEPA certificate, does not satisfy the legal mandate to serve the Medford Hillside neighborhood, and contains a Station design for Route 16 that is literally "designed to fail".

The DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014. The extension to Route 16 in a Phase II will simply never be built.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR. For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

• **A two-phased approach is unacceptable.** The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified is simply ridiculous and makes no planning sense whatsoever.

• **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

• **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

• **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. There are five separate Environmental Justice sites within walking distance of the Route 16 terminus that will simply not be served by a College Ave terminus.

I-063-001

Please see Comment Letter I-002.

• **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. There has been a lot of goal-post moving by the State to try to redefine the geographic boundaries of Medford Hillside, but facts are stubborn things, and the fact is that the closest Medford Hillside resident (other than Tufts) is at least ¼ mile walk from the proposed College Ave. Station. The Medford Hillside stretches a full mile beyond College Avenue to the Mystic River and the vast majority of the Medford Hillside neighborhood will not be served by a College Ave terminus. No amount of geographic gerrymandering can change this fact.

• **The Route 16 station design in the DEIR is "Designed to Fail".** The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering cohesive and workable station designs for all other Green Line extension stations. As an architect and planner, I can plainly see that no serious effort was ever made to make the Route 16 terminus work in the DEIR "design" for Route 16. On the contrary, it was literally designed to fail by wiping out existing buildings and looking like what is was: a bad-faith effort. For this reason alone, the DEIR should be rejected and a real design explored in a final EIR. And such a design will realize the fantastic potential of a Route 16 terminus: Transit-Oriented-Development opportunities, pedestrian connections to the nearby West Medford Commuter Rail Station, excellent bus service opportunities, and bike/walking trail connections that will stretch five miles from the Alewife Red Line Station to the Wellington Orange Line Station, and much more. Route 16 is a near-perfect example of "Smart-Growth" that Massachusetts is now encouraging and is superior in every facet to College Ave as a terminus.

The Medford Green Line Neighborhood Alliance, a volunteer citizen group, of which I am a member, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

Finally, I would like to make a few comments about the City of Medford's overall response to the Green Line Extension project. To be blunt, my city government has failed me and the thousands of Medford residents who will be better served by the Green Line Extension project. For the past four years, the City of Medford has done the following in regards to the Green Line Extension Project:

- Refused to engage the Green Line project in any meaningful way
- Taken no official position on the project
- Provided zero planning resources devoted to the project
- Failed to provide Medford residents with even the most basic information on the project, which to this day - four years later - is still not mentioned on the City of Medford website.

It has been a shameful performance. My larger point is that I do not feel that the citizens of Medford should be penalized or lose an opportunity to have a once-in-a-generation opportunity to gain a new piece of transportation infrastructure that will improve our quality of life because we have an incompetent city government with absolutely no planning capacity or vision to deal with a project as complicated as the Green Line Extension project. While our so-called leaders have sat on the sidelines for the past four years, Medford residents spoke loud and clear when over 1,100 of us signed an online petition supporting the Route 16 terminus in 2008. Over 1,000 Somerville residents also signed the petition.

To summarize, I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis to go to Route 16 to serve the largest possible population, achieve the maximum ridership, take the most cars off the road and provide the maximum air quality and environmental benefits to the residents of Cambridge, Somerville, Medford and Arlington.

Thank you for your time and consideration.

Doug Carr
124 Boston Avenue
Medford, MA 02155

Johnson, Holly (EEA)

From: krogen carreno [k_carreno@hotmail.com]
Sent: Friday, January 08, 2010 7:22 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension DEIR comment letter
Attachments: Glass Factory Condo resident letter regarding Green line extension.doc

Ms. Johnson,

Please See attached letter regarding the proposed extension of the green line and how it would affect my property at the glass factory condos.

Thanks in advance for your time and consideration in resolving this manner in the best possible way for residents and owners.

Sincerely,
Krogen Carreno

Hotmail: Trusted email with Microsoft's powerful SPAM protection. Sign up now.

Krogen Carreno
169 Monsignor Obrien Hwy., unit 507
Cambridge, MA 02141

January 08, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-064-001 I am a resident & owner at the Glass Factory Condominiums. I have the following concerns about the Green Line Extension Project; which I feel that if not addressed in the proper manner, will have a negative impact not only in the quality of life of the residents of the Glass Factory Condominiums, but could also be detrimental to the value of the property in an economy where homeowners really can't afford to lose equity and be under water in their mortgages. Noise, smoke, garbage, and all the general issues associated with a public subway station would be brought to our doorsteps and we ask that you please address these issues plus the ones below to prevent impact to owners and residents.

TRACKS ARE WAY TOO CLOSE TO OUR BUILDING.
In the present design the tracks run very close to the rear of our building. We urge your designers and engineers to place the tracks as far away from the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo

I-064-001

Please see Comment Letter I-013 for responses to this form letter.

building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

Sincerely,

Krogen Carreno

Johnson, Holly (EEA)

From: rolando carrera [rolandocarrera1@hotmail.com]
Sent: Thursday, January 07, 2010 11:01 PM
To: Johnson, Holly S (ENV)
Subject: proposed T stops (Orange and Green)

To whom it may concern,

I-065-001

This brief note is to express my support for the expansion project for the green and Orange line. I truly believe on the benefits to the economy the environment and the betterment of the communities that surround both lines.
As gas prices rise and our country's dependency on foreign oil increases we need to find ways to decrease such dependency and to improve the quality of the air.
In the history of mankind easy access to public transportation has always been a key element for the healthy growth of the communities. Good luck in your project.

Sincerely,

Somerville home owner since 2007

Rolando Carrera

112 Sycamore street # 4

Somerville, MA 02145

"

Keep your friends updated— even when you're not signed in.

1

I-065-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Johnson, Holly (EEA)

From: Patty Caya [pcaya@yahoo.com]
Sent: Friday, January 08, 2010 10:55 AM
To: Johnson, Holly S (ENV)
Subject: EEA #13886
Attachments: January 8_DEIR_feedback.pdf

Dear Ms. Johnson,

This letter is meant to serve as feedback to the DEIR provided for the proposed Green Line extension project. I have attached a PDF file with my comments on this important issue.

Thanks.

Patty Caya
1 Monument Street
Medford, MA 02155

January 8, 2010

Secretary Ian Bowles
MEPA Analyst Holly Johnson
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Reference: EEA #13886

To Whom It May Concern:

In reviewing the DEIR for the proposed Green Line extension project I find many objections to this document and suggest that the agency revisit the document so that it better serves as an Environment Impact Statement for the project so that the project better serves the needs of the community.

I-066-001

1. A two-phased approach (as currently outlined in the DEIR) is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and environmental impact and achieve the maximum benefits with regard to ridership, VMT (reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with this approach, including:

I-066-002

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical to the community and to the population this project is meant to serve.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (meant to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, it is not a good location for a terminus.

I-066-003

- **Cost.** The two-phased approach is fiscally irresponsible. Having a single stop (just over one mile of track) be severed from the project as a whole will cost the state and thus the taxpayers, significant additional money, whereas finding ways to reduce costs in the overall project could easily provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach. And If Route 16 is never built the costs for College Avenue will be significantly higher because first it will be built as an interim station, then it will have to be re-built as a terminus station later in the project.
- **Project Management.** From a project management perspective, there are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project such as a single station stop.

I-066-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

MassDOT is working with MAPC and the Legislature to identify funding for the extension to Mystic Valley Parkway/Route 16.

I-066-002

MassDOT is working with MAPC and the Legislature to identify funding for the extension to Mystic Valley Parkway/Route 16. In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-066-003

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. It is worthwhile to note that the College Avenue Station will not need to be rebuilt should the future extension to Mystic Valley Parkway / Route 16 be constructed. Only minor modifications to

I-066-004

- **Environmental Justice:** The environmental justice population used in part, to justify the project as a whole will not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus. The Green Line extension needs to go all the way to Route 16 and it needs to be a single-phase project, rather than having a single stop relegated to a distant, separate (and unlikely) phase II project.

I-066-005

2. College Avenue should not be a terminus. If the proposed Phase II is not funded (a very high probability), the College Avenue stop becomes a de facto terminus station. This station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station and the damage in terms of traffic flow and environmental damage is unfathomable.

The DEIR does not address the high probability that the line will terminate at College Avenue due to the precariousness of the proposed Route 16-as-a-separate-phase-project, with no identified funding source. I think the Route 16 terminus should be a guaranteed as part of this project so that College Avenue is not at risk of becoming a terminus by default. The only way to do that is to make Route 16 part of the project, not a Phase II.

I-066-006

3. The Route 16 station design (included in the DEIR) is a poor attempt to fulfill the project requirements. The DEIR offers only a "worst case scenario" (as stated in the document) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. Even MGNA, a community organization comprised of ordinary citizens has offered a better station design approach than what is included in the DEIR. MGNA has proposed a station design that protects significant property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the stations surroundings. Surely, the agencies involved in the DEIR can produce a better design.

I-066-007

I implore you to revisit this document and make it right. So many people have taken time to provide feedback on this project and to attend meetings and to provide comments along the way. It would be an insult to their efforts and to the community at large if this document is allowed to stand as the final EIR for the project. And a bigger insult would be for this project to proceed in a manner that is not the most beneficial and responsible, as it will impact not just the community today, but the community for generations to come.

Please do the right thing.

Patty Caya
1 Monument Street
Medford, MA 02155

the Commuter Rail tracks in the area between Brookings and Winthrop Streets would be required. Limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time.

I-066-004

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-066-005

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

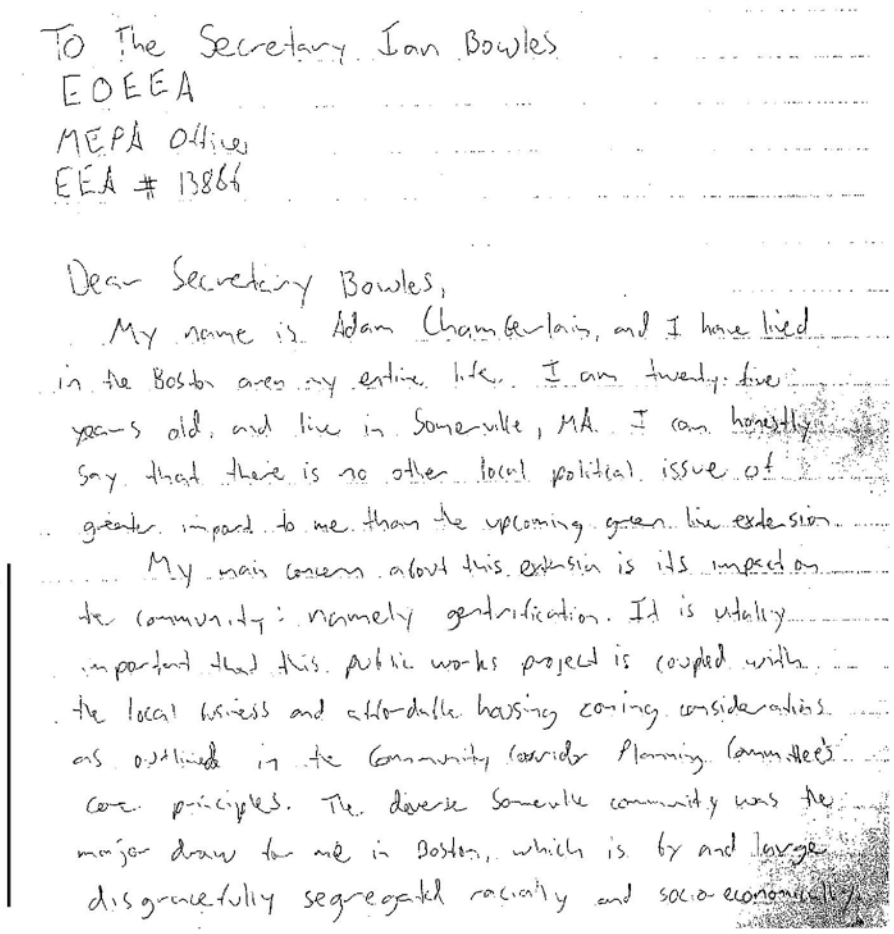
I-066-006

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley

Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-066-007

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.



To The Secretary Ian Bowles
EOEEA
MEPA Office
EEA # 13864

Dear Secretary Bowles,

My name is Adam Chamberlain, and I have lived in the Boston area my entire life. I am twenty-five years old, and live in Somerville, MA. I can honestly say that there is no other local political issue of greater import to me than the upcoming green line extension.

My main concern about this extension is its impact on the community: namely gentrification. It is vitally important that this public works project is coupled with the local business and affordable housing zoning considerations as outlined in the Community Corridor Planning Committee's core principles. The diverse Somerville community was the major draw for me in Boston, which is by and large disgracefully segregated racially and socio-economically

I-067-001

I-067-001

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

MassDOT has reviewed and considered the “Core Community Principles” for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

I-067-002

I would also like to use this opportunity to strongly advocate in favor of a community path linking Boston with the metro northwest. This sort of ease of public transit is incredibly important for drawing, and keeping young, educated people in the area. I grew up in Lexington, MA and have seen the transformative power of the Minuteman Commuter Bikepath.

Thank you for your consideration of my opinion.

Regards,

Adam Chamberlain

Community Health Worker, BWH

I-067-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

From: 01/07/2010 21:27 #007 P.001

Samir Charnalia
169 Monsignor O'Brien Highway, #712
Cambridge, MA 02141

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-068-001

I am currently a resident at the Glass Factory Condominiums. I am deeply considered with the Green Line Extension Project. My wife and bought in the Glass Factory in the summer of 2006. At the time of our purchase we were told that the train station was going to be enclosed in a glass tunnel, at least 50 feet from our building. As it stands the current plans are completely different and not at the level of our satisfaction.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

I-068-001

Please see Comment Letter I-013.

From: 01/07/2010 21:27 #007 P.002

I-068-001

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

I-068-002

Lastly, since this whole community has been waiting for this train station for a very long term I strongly urge to listen to our concerns. This is an extremely important part of Cambridge and as a resident I would like to see it done the proper way. I think if done in a proper way this train station can really enhance this particular section of Cambridge.

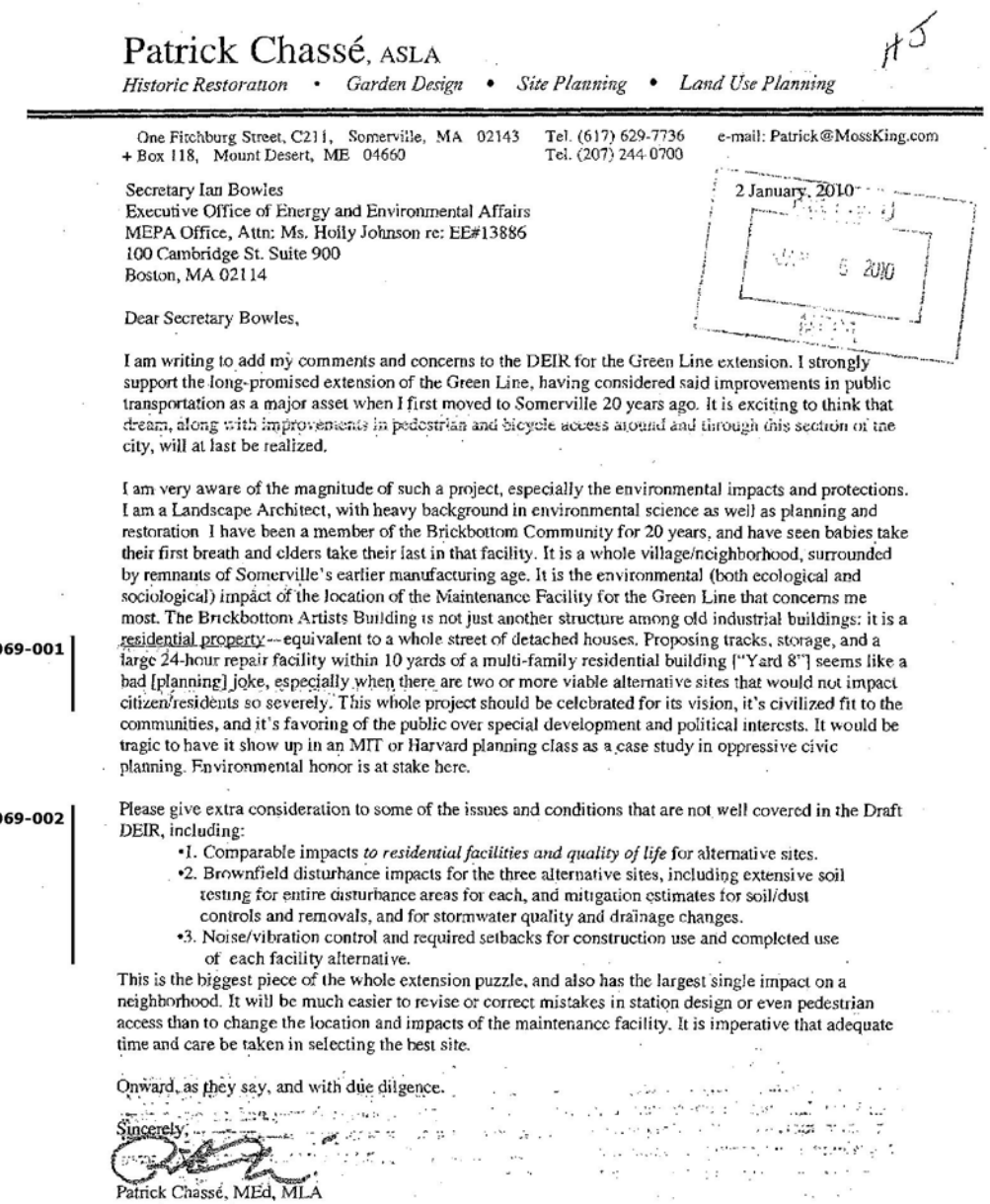
Thank you for hearing my concerns.

Sincerely,

Samir Charnalia

I-068-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



Patrick Chassé, ASLA

Historic Restoration • Garden Design • Site Planning • Land Use Planning

#5

One Fitchburg Street, C211, Somerville, MA 02143 Tel. (617) 629-7736 e-mail: Patrick@MossKing.com
+ Box 118, Mount Desert, ME 04660 Tel. (207) 244-0700

2 January, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Ms. Holly Johnson re: EE#13886
100 Cambridge St. Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I am writing to add my comments and concerns to the DEIR for the Green Line extension. I strongly support the long-promised extension of the Green Line, having considered said improvements in public transportation as a major asset when I first moved to Somerville 20 years ago. It is exciting to think that dream, along with improvements in pedestrian and bicycle access around and through this section of the city, will at last be realized.

I am very aware of the magnitude of such a project, especially the environmental impacts and protections. I am a Landscape Architect, with heavy background in environmental science as well as planning and restoration I have been a member of the Brickbottom Community for 20 years, and have seen babies take their first breath and elders take their last in that facility. It is a whole village/neighborhood, surrounded by remnants of Somerville's earlier manufacturing age. It is the environmental (both ecological and sociological) impact of the location of the Maintenance Facility for the Green Line that concerns me most. The Brickbottom Artists Building is not just another structure among old industrial buildings: it is a residential property—equivalent to a whole street of detached houses. Proposing tracks, storage, and a large 24-hour repair facility within 10 yards of a multi-family residential building ["Yard 8"] seems like a bad [planning] joke, especially when there are two or more viable alternative sites that would not impact citizen/residents so severely. This whole project should be celebrated for its vision, it's civilized fit to the communities, and it's favoring of the public over special development and political interests. It would be tragic to have it show up in an MIT or Harvard planning class as a case study in oppressive civic planning. Environmental honor is at stake here.

I-069-001

Please give extra consideration to some of the issues and conditions that are not well covered in the Draft DEIR, including:

- 1. Comparable impacts *to residential facilities and quality of life* for alternative sites.
- 2. Brownfield disturbance impacts for the three alternative sites, including extensive soil testing for entire disturbance areas for each, and mitigation estimates for soil/dust controls and removals, and for stormwater quality and drainage changes.
- 3. Noise/vibration control and required setbacks for construction use and completed use of each facility alternative.

I-069-002

This is the biggest piece of the whole extension puzzle, and also has the largest single impact on a neighborhood. It will be much easier to revise or correct mistakes in station design or even pedestrian access than to change the location and impacts of the maintenance facility. It is imperative that adequate time and care be taken in selecting the best site.

Onward, as they say, and with due diligence.

Sincerely,

Patrick Chassé, MEd, MLA

I-069-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-069-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-070-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-070-001

Please see Comment Letter I-013 for responses to this form letter.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Signature

GHADI CHEMALY
Print Name

169 Msgr O'Brien Hwy #314
Address

Johnson, Holly (EEA)

From: LUCY CHEN [l.chen@rcn.com]
Sent: Friday, January 08, 2010 1:41 AM
To: Johnson, Holly S (ENV)
Subject: comment on DEIR for the Green Line Extension
Attachments: The Executive Office of Energy and Environmental Affairs.pdf

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 7 2010
MEPA

Reference to Project No. EEA# 13886

Dear Secretary Bowles:

I support the "Commonwealth's commitment to the **principles and practice of smart growth**" as stated by the Secretary of Environmental Affairs on the Dec. 2006 notification form regarding the Green Line Extension. As a long time citizen of Massachusetts, I can envision the Green Line Extension as an opportunity for growth and improved quality of life for the residents of Greater Boston, Cambridge, Somerville and Medford.

As a resident of Brickbottom Condominums, I have lived and worked daily along side of the MBTA Fitchburg rail line for the past 15 years. Over these years, I've witnessed the **practice** of the MBTA, which has often fallen short of its stated policies. (Just 2 nights ago, a diesel commuter rail engine stood idling with its engine roaring outside my window at 2:30 am—I believe that is against both the FTA's and MBTA's stated policy—though in practice it has happened frequently.)

I-071-001
I-071-002

I have grave concerns as I review MassDOT's (or EOT and MBTA's) DEIR for the Green Line Extension. The proposed conceptual plan shows disregard for the abutters along MBTA's existing railroad ROW. For instance, little detail is given about how the new Green Line will be integrated into the existing Fitchburg Line and what sort of mitigation efforts will be in place before, during and after construction of the Green Line Extension. I urge you to require specific plans for mitigation and accurate measurements of noise, vibration, hazardous waste, air and water quality impact on residences and businesses along the Green Line Extension corridor. I believe, from having lived next to the Fitchburg rail line during construction of a switch box and bulkhead, that construction of the Green Line Extension will cause significant negative impact to the quality of life of Brickbottom residents. Though the DEIR mentions mitigating the impact to residences by limiting night time construction, that was not the practice during the previous construction along the Fitchburg Line--construction frequently started at midnight and ended at 4 am with no efforts to mitigate noise, dust and light pollution. Which agency would oversee the EOT/MBTA's compliance to mitigate the negative environmental impact to the abutters of the project? What recourse would we as citizens have if EOT/MBTA does not follow the guidelines set forth by MEPA and NEPA? Will a field office be set up where citizens can interact with an oversight agency during construction? I request that a citizen advisory committee be established to address community concerns and the project is permitted to go forward only with sincere effort by MassDot and its contractors to involve and respectfully address the concerns of the abutters and citizens effected by the Green Line Extension.

I-071-003

I oppose the choice of "Yard 8" as "the most practicable" site for the maintenace facility and storage yard for the Green Line Extension. A maintenance facility at "Yard 8" would prevent future development of the Brickbottom/Inner Belt area and permanently sever Brickbottom from the possibility of becoming part of a larger neighborhood that links Union Square to Charlestown. Building the maintenance facility at "Yard 8" goes against the stated goals of the Green Line Extension project, which is to spur economic growth and development and improve the quality of life for all residents along its corridor. Taking 11.5 acres of land, which has been zoned and permitted for development deprives the City of Somerville and the State of needed tax revenues. I believe further study of "Mirror H" and "Option L" as alternate sites is required.

I-071-004

During these difficult economic times, it only makes sense to move forward with a plan that brings about **smart** growth. The State and Federal government cannot afford to underwrite a plan that has the potential to bring disproportionate distress to an established, thriving community of artists, professionals, academics, small businesses, all of whom contribute significantly to the value of this area. I believe it is possible to come up with revisions to the DEIR for a Green Line Extension that will promote growth and benefit all along its route. I ask that your office take into consideration the needs of the citizens the Green Line Extension is designated to serve.

Sincerely,

Lucy Chen

I-071-001

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

Additionally, MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. Mitigation measures for the College Avenue and Lechmere Stations are further described in FEIR Chapters 4 and 5, respectively. The mitigation measures required by the Certificate are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-071-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-071-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it

should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-071-004

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Adam Chiavoli
169 Monsignor O'Brien Highway #701 • Cambridge, MA 02141
Phone 781-367-2124 • E-mail achiavoli@yahoo.com

January 6, 2010

Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

RECEIVED
JAN 7 2010
MEPA

Dear Secretary Bowles:

I have been resident of the Glass Factory Condominiums several years and have many concerns regarding the Green Line Extension/Lechmere Station.

I-072-001 The first issue is the proximity of the new station to the Glass Factory. Specifically the tracks run far too close the rear of the building. There is simply no way trains can run so close to our building without have a substantial negative effect.

I-072-002 Second the current design of the new Lechmere Station is frankly sub-par and will only detract from the neighborhood. The Lechmere neighborhood is home to a large mall, several hotels, a world-class museum and is close by to the Banknorth Garden. Needless to say, tourists flock to the area. Lechmere should be a centerpiece station that incorporates modern facilities but also a pleasing aesthetic design. Additionally, an effort must be made to preserve as much green space as possible. As Lechmere will no longer be an endpoint of the Green Line, there will be no need for substantial parking spaces. This will improve the landscape of the area and reduce traffic and noise pollution. The reclaimed space can be put to better use.

I-072-003

I-072-004 Finally I strenuously object to the Mirror H location of the maintenance facility. That location makes little sense as it is far too close to residential property, and is prime land that can be developed in the future. I urge you to reconsider placing the facility here and move it to the end of the Green Line.

Thank you for taking to time to review my suggestions.

Sincerely,

Adam Chiavoli

I-072-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-072-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-072-003

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-072-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Dorie Clark [clarkstrategic@gmail.com] on behalf of Dorie Clark [dorie@dorieclark.com]
Sent: Monday, October 26, 2009 10:35 AM
To: Johnson, Holly S (ENV)
Subject: Green Line comments

I-073-001
I-073-002
I-073-003

Hi Holly, my name is Theodora (Dorie) Clark and I'm a resident of East Somerville and Vice President of East Somerville Main Streets, a local civic group. I am writing to express my strong support for the Green Line extension. Specifically, I would like to request that there be a stop at both Brickbottom and one at Washington and Joy Streets, which will provide important transportation options for residents in the area. Additionally, I would like to urge EOT to site the maintenance facility at Mirror H, rather than next to Brickbottom. This will allow Somerville to develop underutilized land and create jobs, which will in turn create tax benefits for the state. Finally, I strongly support extension of the Green Line all the way to Route 16, and believe this should also be done by 2014, as I worry that without a firm commitment, it will be put permanently on the backburner. Thank you.

Best regards,
Dorie Clark

Dorie Clark
39 Franklin St. #4
Somerville, MA 02145
Clark Strategic Communications
Aspen Development Strategies
Google Voice: 617-942-1598
www.dorieclark.com
www.aspendevelopmentstrategies.com
twitter.com/dorieclark
Podcast: dorieclark.podomatic.com

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1

I-073-001

Based on the analysis conducted during development of the DEIR/EA, it was determined that only one station would be warranted in the vicinity of the Brickbottom neighborhood and Washington Street. This analysis can be found in Appendix A of the DEIR/EA.

I-073-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-073-003

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Scott Clark [sclark100@gmail.com]
Sent: Friday, January 08, 2010 11:07 AM
To: Johnson, Holly S (ENV)
Subject: Comments on the Green Line DEIR

Dear Mr. Ian Bowles,

Thank you for your work on the Green Line/Community Path extension.
Both aspects of the project will go a long way towards reducing automobile dependence and increasing the quality of life for thousands of area residents. I fully support the Green Line and Community Path extensions and can't wait to see the positive effects the extension has on the community. The most critical piece of the success of this project lies in how well the extension is tied into the surrounding community.

I-074-001

That is why I was so glad to hear the state agreed in a February 24, 2009 letter to design and build the community path extension as part of the same project as the green line extension. In addition to increasing the connectivity, health and vitality of area residents, the community path extension will serve to funnel riders to the green line stations and could not be a better complement to the Green Line extension. As such, I fully expect that the community path extension will be given the same resources and consideration and timeline as the Green Line extension. This includes providing any and all necessary support to allow for as much funding as possible from every possible source.

I-074-002

I-074-003

It is also critical for the state to design the project in such a way as to not preclude future extensions. First, the project should be built Rt. 16 to begin with, to best take advantage of the current momentum. Second, extending the Union Square extension to Porter Square is an obvious and very promising possibility for the future.
The Union Square station needs to be designed to best facilitate this future extension.

I-074-004

Finally, the extension project needs to be designed to best support and accommodate economic vitality and growth in the surrounding areas.
The Yard 8 option needs to be dropped, as this piece of land is possibly the most promising area for future development within the city of Somerville, particularly given its proximity to the Charles River and to Boston. Train maintenance facilities are a neccessary evil, and as such the new Green Line maintenance facility needs to be sited as close as possible to the existing Boston Engine Terminal via the Mirror H option, Option L or Option L-BET.

Thank you for your time, hard work and consideration.

Scott Clark
Somerville, MA

I-074-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-074-002

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), “Determination of Air Quality Emission Reductions.” These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010).

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-074-003

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-074-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Fernando Colina [odnanrefcolina@gmail.com]
Sent: Wednesday, January 06, 2010 11:25 AM
To: Johnson, Holly S (ENV)
Subject: Extension of the Green Line

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181

January 6, 2010

Dear Secretary Bowles,

My name is Fernando Colina and I am a Medford homeowner. I am also the parent of three children, two of whom are in the Medford public schools.

I-075-001

I am concerned that the Commonwealth is not fulfilling its obligations by not extending the green line through to route 16. I am perfectly aware of the concerns of some West Medford residents regarding property values but see no merit to their fears.

I grew up using public transportation in Brookline, (the B, C and D lines) and know that the ability for my children to make use of the train system will expand their cultural lives. The Commonwealth has the obligation to taxpayers and its citizens to invest in sensible public transportation.

Sincerely,

Fernando Colina

108 Bowdoin Street
Medford, MA 02155

1

I-075-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Scott Cooledge [scottcool@comcast.net]
Sent: Wednesday, January 06, 2010 4:41 PM
To: Johnson, Holly S (ENV)
Subject: Emailing: GLEMF - Yard 8
Attachments: GLEMF.doc

The message is ready to be sent with the following file or link attachments:
GLEMF

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Executive Office of Energy and EnvironmentAffairs
MEPA Office; /attn:Holly Johnson,Analyst
100 Cambridge Street, Suite 900,
Cambridge, MA 02114

January 5, 2010

Ref: EEA #13886

Dear Secretary Ian Bowles,

I-076-001

I am a resident owner of "Brickbottom", 1 Fitchburg Street, Somerville since 1994 and strongly opposed to the Green Line Maintenance and Storage Facility (GLEMF) on YARD 8 acreage adjacent to my home. The alternate site proposals – Mirror H and Option L – are far less detrimental to me, my Brickbottom Community and Somerville.

I "bought in" to this community's ambiance and the civic involvement and pride of it's residents, all positives in spite of being adjacent to McGrath and Obrien Highway, an already active T line to the suburbs, and a waste transfer station. The residents here suffer more noise and odor/pollution than 99% of any other resident from Somerville or surrounding towns. I do not oppose the Green Line Extension that will be built adjacent to my building (on the opposite side from the present T suburban line) even though the noise pollution will increase significantly. Proposed noise and glare mitigation is a pallative and will not work.

Secretary Bowles, since the beginning of this project, your committee has ignored all reasoned opposition to YARD 8 from city officials and other groups. The first tacit recognition was the 12/16/09 "Alternative Sites Meeting" in Cambridge where I got the feeling your committee is still set on YARD 8. For example, your mathamatical "in-house" study of the best of the three sites and it's conclusion leaves me suspect . In addition, I have the feeling that the committee accepted the T administration's initial requirements for the Green Line Extension and the GLEMF carte blanche with no outside professional consult on these requests.

Again, the alternative site to YARD 8 must be determined,so that your committee can move on to other problems presented by the Green Line Extension project.

Yours Truly,

W. Scott Cooledge
1 Fitchburg Street, C520,
Somerville, MA 02143
617 776 6204 scottcool@comcast.net

I-076-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Executive Office of Energy and EnvironmentAffairs
MEPA Office; /attn:Holly Johnson,Analyst
100 Cambridge Street, Suite 900,
Cambridge, MA 02114

RECEIVED
JAN 8 2010
MEPA

January 5, 2010

Ref: EEA #13886

Dear Secretary Ian Bowles,

I am a resident owner of "Brickbottom", 1 Fitchburg Street, Somerville since 1994 and strongly opposed to the Green Line Maintenance and Storage Facility (GLEMF) on YARD 8 acreage adjacent to my home. The alternate site proposals – Mirror H and Option L – are far less detrimental to me, my Brickbottom Community and Somerville.

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Again, the alternative site to YARD 8 must be determined,so that your committee can move on to other problems presented by the Green Line Extension project.

Yours Truly,

W. Scott Cooledge III

W. Scott Cooledge
1 Fitchburg Street, C520,
Somerville, MA 02143
617 776 6204 scottcool@comcast.net

November 18,2009
Reference: Greenline Extension & Yard 8 Maintenance & Storage Facility

TO: Executive Office of Transportation and Public Works

I-077-001

As a resident owner at "Brickbottom" (BB) 1 Fitchburg Street since 1994, I'm strongly against the building of a Green Line Extension Maintenance and Storage Facility (GLEMF) on "yard 8" acreage right adjacent to my home.

I "bought in" to the ambiance of the of the community here, the residents' civic involvement with the city, and it's positive political activism - all these positives in spite of the negatives of being adjacent to Mcgrath and O'Brien Hwy, an active "T" line to the suburbs, and a Waste Transfer Station. The first two are of varying noise levels 24/7 and the the third can be very odorous, depending on the wind. I have more noise here than 99+% of the other Somerville residents so please let someone else take the "hit" for this new very noisesome and bright glare maintenance facility on Yard 8. MIRROR SCHEME H is a much better location for both the maintenance facility and storage yard for many reasons.
One might say that "Those Brickbottom residents don't want GLEMF in THEIR backyard". Well, us BB residents already have more than enough in our backyard. There are other sites available. Please knock "Yard 8" off your list for GLEMF.

Thank you in advance for your consideration.

Sincerely,

W. Scott Cooledge "BRICKBOTTOM"
1 Fitchburg Street, Apt C-520
Somerville Mass. 02143 617 776 6204 scottcool@comcast.net

I-077-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



December 30, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs -- MEPA Office
Attn: Holly Johnson, MEPA Analyst --EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-078-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014. In my opinion, the DEIR as currently written does not serve the best interests of the project.

More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR. For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. **A two-phased approach is unacceptable.** The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means that the Route 16 terminus may never be built – and placing the terminus at Route 16 is of absolute paramount importance to achieving the project's overall goals and fulfilling its overall obligations.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

I-078-001

Please see Comment Letter I-002 for responses to this form letter.

• **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

• **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

• **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

• **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. **College Avenue should not be a terminus.** The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. **The Route 16 station design is inadequate.** The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves 182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Sincerely,

Kevin Costello & Bethany Morris
34 Kilgore Avenue
Medford, MA 02155

Johnson, Holly (EEA)

From: Cote, Paul [pbcote@gsd.harvard.edu]
Sent: Wednesday, January 06, 2010 9:53 AM
To: Johnson, Holly S (ENV)
Subject: EEA #13886 Comments on Greenline DEIR
Attachments: EEA_13886_paulcote_greenlineext_deir_comments.pdf

Hi Holly
Please find attached a pdf including my comments for the greenline extension deir.

I would appreciate it if you could let me know if there are any problems with this document.

Thank you very much

--pbc

Paul Cote
Harvard Graduate School of Design
Geographic Information Systems Specialist
Lecturer in Urban Planning and Landscape Architecture

Secretary Ian Bowles
Executive Office of Energy and
Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114
Attn: Holly Johnson, MEPA Analyst
EEA #13886
Email: Holly.S.Johnson@state.ma.us

From: Paul Cote
85 Sixth Street
Cambridge, MA 02141
email: pbcote@gsd.harvard.edu

Date: January 5 2010

Cc: William Deignan and Beth Rubenstein City of Cambridge Community Development
Subject: Green Line Extension Draft Environmental Impact Review.

Dear Secretary Bowles,

I am one of the two Cambridge representatives on the Community Participation Committee for the Green Line Extension project. I appreciate the thoroughness and patience of your staff and your consultants throughout the DEIR development and review process. The documentation and the web site are – with very few reservations -- commendable. I am a huge supporter of this project in general, along with the community path which in the fullness of time should be an integral part of the transportation solution for Somerville, Medford and Cambridge residents. I especially appreciate the opportunity to offer these comments to the Draft Environmental Review with the expectation that they will be considered as design moves into the next phases -- and I look forward to my continued participation in this process.

I live in East Cambridge, I am a lecturer in Urban Planning and Design at the Harvard Graduate School of Design, and I have been active with members of my neighborhood group – the East Cambridge Planning Team in evaluating and devising proposals for the new Lechmere station and associated arrangements to get people safely to the new station once it is moved to the other side of the McGrath O'Brien Highway. This letter represents my own findings– but this has been shaped by a substantial amount of collaborative work with my neighbors – who will probably also be submitting comments as individuals or as a group.

My comments and questions are organized under the following four headings:

1. Design of the Lechmere station and its entrances.
2. Design of the vehicular circulation around the Lechmere station
3. Overall impact on the Lechmere Square area.
4. Maintenance Facility

1. Current Station Design is Unfair to East Cambridge

I-079-001

The design of the new Lechmere station as it appears in the DEIR is the worst of any of the stations proposed along the extension. It is the only station design that features outdoor turnsylyes and fare machines. It is the only station that does not include landscaping. The station design has a very unsafe pedestrian accommodation. This is a shame, since the users of the Lechmere stop are the only

I-079-001

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-079-001

constituents along the green line extension who are actually sacrificing T access. Although this oversight probably results from the hurried design process as the Lechmere station was an unexpected addition, many people in East Cambridge see this lack of consideration as an insult, and I don't blame them. We all went through a long process of participation and collaboration during the Northpoint permitting process, and it is very discouraging to see the new station design completely ignores the accommodation that is in this plan and the future possibility of making a graceful connection with the pedestrian oriented Northpoint street plan.

1.a Provide an Indoor lobby for the Lechmere station

If you examine all of the other station designs proposed for Somerville and Medford, you will see that each of them has an indoor lobby that includes fare machines and turnstyles and room for queuing passengers. The Lechmere station is the only one proposed for which the turnstyles and Charlie card machines are outside the station. Please review this design and use the room that is available to make a more generous and attractive station.

1.b Provide Adequate Pedestrian Access to the Station Entrance

It is not uncommon for trains stopping at Lechmere to release as many as 75 passengers at a time – many of them headed toward the Galleria Mall. The current station design provides a very narrow 5 foot sidewalk that is hard against a cute that is designed for high-speed egress of busses from the lay over area. This sidewalk is not wide enough for the normal queue of departing passengers when you consider that some of them will be lining up to buy Charlie tickets at the outdoor machines,, as others try to push past them to get to the turnstyles. When you consider that this will be happening as crowds of arriving passengers pushing the other direction. The design of the Lechmere station should have a much wider sidewalk as was accommodated in the Northpoint plan, see Figures 1, 2 and 3.

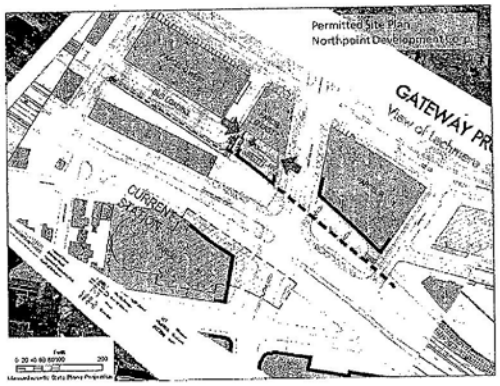


Figure 1: Street Grid as Permitted in Northpoint

I-079-002

Please see response to Comment I-079-001.

I-079-003

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. Landscaping elements will be considered as the design advances.

I-079-004

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-079-002

1.c Allow for passengers entering at eastern end of station Platform

The current station design provides an exit, but not an entrance at the eastern end of the platform. There are several hundred built dwelling units in the Sierra, Tango and Archstone Developments, as well as Museum Towers and the Canal Park Residences who would be saved hundreds of steps if they could enter the station with their Charlie cards without walking all the way past the platform to enter at the head house. This accommodation could be made with the simple addition of a Charlie Card reader at this end.

I-079-003

1.d Provide Landscaping for Lechmere Station

Each of the other stations in the Greenline extension provides for trees and planted areas around the station, except for Lechmere. Why is this? It is not like there is a lack of T owned property.

I-079-004

2. Redesign Vehicular Circulation Around Station in Keeping with Urban Pedestrian Environment

The design of the bus and automobile circulation around the proposed Lechmere Station is not in keeping with a pedestrian oriented district such as East Cambridge and Northpoint. The wide radius curves and lack of consideration for pedestrian crossings and pick-up and drop of areas, as well as the excessive amount of parking and lack of landscaping provided at this station will make this an unpleasant place to be for users who are already having to accept the fact that their station will be relocated across a six lane highway. The design will be very difficult to integrate with the Northpoint street grid if it should be built, and the maintenance of so much parking at this station is not justified since the Lechmere station will no longer be the end of the line.

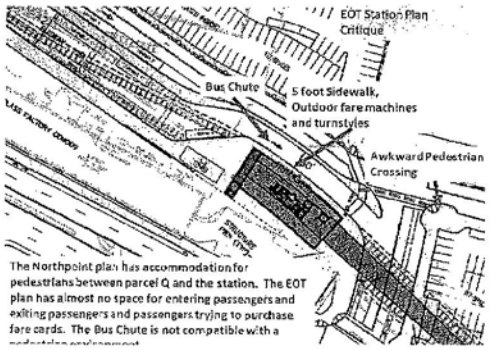


Figure 2: MassDOT Station Plan has many problems

I-079-005

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

I-079-006

Please see response to Comment I-079-004.

I-079-007

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-079-005

2.a Eliminate the Bus Chute that Pinches up against the Pedestrian Access to Station

The proposesdstation design provides a dedicated egress for busses leaving thre layover area. The radius on this egress appears to be designed to let the busses sail past the pedestrians crouded between the station and the chute on a 5 foot sidewalk. Please see figure 1 for an idea of how the egress for busses should be integrated more gracefully with the street grid of Northpoint.

I-079-006

2.b Improve Pedestrian Crossings of First Street for Northpoint Residents

The proposed circulation pattern around the station is not very considerate of the pedestrians who would be approaching the station from the Archstone and Tango, Sierra and Museum Towers properties. Because of the aforementioned bus chute, these pedestrians have a very complicated crossing as shown in figure 1a. Figure 1b shows how an improved alignment of the circulation will improve pedestrian access.

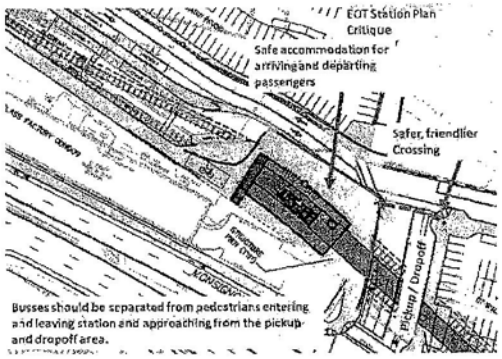


Figure 3: Improved Station Design

I-079-007

2.c Reduce Parking and Improve Parking Lots at Lechmere

One of the biggest down sides of the displacement of the Lechmere station across McGrath highway is the fact that the area on the the other side is extremely unwelcoming in all seasons. The station design as proposed in the DEIR accommodates a large number of parkng places, which is not appropriate for a transit oriented development. The prioritization of parking (which is surrounded by fences) is going to make this a very unattractive area to be as a human being. The number of parkng places should be reduced substantially, and the lots if they remain should not be fenced off and should have grassy areas and trees.

I-079-008

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-079-009

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-079-008

3. Work with community to Avoid Blight in Aftermath of Station Relocation

By moving the Lechmere station across a 6 lane McGrath Obrlen Highway, the Lechmere square area will be negatively impacted. Not only will access to the green line be reduced, but the abandonment of the old station and the uncertainty of how this will be redeveloped will potentially create a lasting negative impact on this gateway to East Cambridge. The community has come together to come up with proposals for the old station parcels that allow for all of the development potential that is currently permitted in the Northpoint PUD, and will also provide for civic space and a welcoming approach to the new Lechmere station. These proposals have been favorably reviewd by the Cambridge City Manager and the Assistant Manager for Design and Development.

3a. Stabilize and Preserve the Historic Lechmere Station Buildings

The civic uses in community vision for the future of Lechmere Square call for the development of a public market that utilizes the historic Lechmere Trolly Stop pavilions. MassDOT should provide for the stabilization of these buildings aftewr the station is moved. By no means should these buildings be demolished. The Northpoint square proposal will be submitted win another comment letter.

3b. Consider Community Vision in the Disposal of the Old Lechmere Station Property

The disposition of the land under the current Lechmere Station is complicated because of the original deal to swap the property with the developers of Northpoint in exchange for the building of the new station. Whatever happens in thei regard, we hope that MassDOT will work with the community to find a buyer or a developer of these parcels who will be willing to work with the community to build a development that fits the vision of the community.

4. Develop the Maintenance Facility According to Option L

The Green Line extension is, by and large, a boon to the neighborhoods that it passes through . A key factor in this is the promotion of transit oriented development – high density residential and commercial development along the corridor. Considering this, the location of the maintenance facility in such a way as to adversely impact the development of the Inner Belt Industrial area and the residential development at Brickbottom – as the Yard 8 proposal would, detracts from the benefits of the Extension. Likewise for the Mirror H proposal, as it would constrict the area of the NorthPoint plan that has been permitted for residential development and as a sound buffer of parking structures between NorthPoint and the Engine Terminal.

I-079-009

Even though it will cost a little more to develop the maintenance facility according to Option L, MassDOT should consider that the other schemes subtract frm the overall goal og promoting transit oriented development – which is a cost that should be weighed more heavily than the simple one-time outlay of funds.

This is the end of my comments. I look forward to seeing these responded to in the final EIR. Thank you for your consideration.

Green Line Extension
January 4, 2010

Dear Secretary Ian Bowles,

JAN 4 2010

Yard 8: NO

In 1977, as Class President at Arlington Catholic High School, I led the charge against the extension of the Red Line to Arlington Center. With great political fanfare, our efforts succeeded, and the Red Line was re-routed to Davis Square. At the time, little did I know that leading this campaign would be the worst decision of my life, for I eventually opened a business in Arlington Center, and found that Davis Square had flourished with the Red Line at a time when many businesses in Arlington Center failed, and my business and livelihood struggled. Against the wishes of local commerce, bad decisions were made by the Town of Arlington and by the local parish; lives and quality of life were profoundly changed, some for the better, many unknowingly, for the long-term, worse.

30+ years later, we are again faced with a decision that will change lives. That decision involves the quality of life of the residents of Brickbottom that can be forever negatively impacted by the verdict to build at the Yard 8 site. We should not allow History to repeat itself when feasible opportunities and obvious, balanced options are readily available. I therefore urge you to consider the better options for the maintenance facility, to build in the Mirror H or the Option L site and NOT build on the Yard 8 site.

I-080-001

Emergency Track Crossover: NO

I-080-002

Additionally, according to the plans revealed at a recent Public Forum, an Emergency Track Crossover is being installed between Central Street and Sycamore Street in Somerville. For the record, I am vehemently opposed to this plan for the following reasons:

1. The use of this stretch of track will be used for emergency drills at night, when the neighbors will be sleeping, making it impossible to sleep. We urge you to relocate this Emergency Crossover.
2. The noise from Commuter and Freight Trains changing engines, blowing horns and practicing at night at this location have caused great stress and anxiety for the neighbors, and we have voiced our complaints to the companies. We urge you to relocate this Emergency Crossover.
3. Because of the low elevation of track, and the cavernous nature of the surroundings, the sound from train activity is both concentrated and amplified in this area, making it impossible to sleep at night. Without effective sound abatement between these two streets, our quality of life and property values will suffer.

I-080-003

Public Voice in Planning: YES

As with all successful civic projects such as the Minuteman Bike Path in Arlington, the key to project success was in the collaboration of citizenry, governance, and industry. We demand that you keep the planning process open to the public beyond January 8 and through to project completion. This project has the greatest impact to the abutters along the tracks, and our quality of life will deteriorate as permanent decisions are made without our voice. We urge you to include the input of the people who stand to be impacted the most during the entire design process.

Thank you for your time and consideration to make this a well thought out legacy.

Gerard M. Cronin
19 Willoughby Street
Somerville, MA 02143
617 776 7206

I-080-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-080-002

The proposed crossover between Central and Sycamore Streets is for Green Line trains. It allows the Green Line trains to move from one track to another during normal hours of operation. It is needed to enable continued operation in the case of a disabled Green Line rail vehicle. There will be no emergency drills or practicing, late night or otherwise, that will involve the crossover. The crossover will have no impact on commuter, Amtrak, or freight rail operations and will requite no additional railroad horn soundings. Additionally, noise walls and vibration mitigation measures are proposed in this area to offset impacts resulting from the Project.

I-080-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: cronut@aol.com
Sent: Friday, January 08, 2010 4:43 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Draft EIR (EEA #13886)

To:
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn:
Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

January 7, 2010

RE: Green
Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

I am writing on behalf of the Friends of the Community Path, a local community group with over 2,000 supporters of the existing and proposed Somerville Community Path. We strongly support the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville and believe in its positive economic and environmental impacts.

However, because of shortcomings and omissions in the design, we cannot support this Massachusetts Department of Transportation (MassDOT) Draft Environmental Impact Statement (DEIR) becoming the Final EIR, unless a Supplemental EIR or Addendum is performed to correct the deficiencies.

We urge you to:
1) Request that MassDOT incorporate the revisions outlined below into the EIR and the subsequent final design
2) Request that MassDOT seek state and federal funding for the Community Path extension as an integral part of the Green Line Extension
3) ensure that a Citizens Advisory Committee public process be instituted to help guide these necessary design improvements.

I-081-001

I-081-002

I-081-003

Although a 10% design stage cannot contain all the details everyone would like, now is the time to ensure that the Community Path extension is incorporated into the final EIR and the subsequent final design. Notably, the Community Path is good for the Green Line, and the Green Line is good for the Community Path. There are many local and national examples of successful rail-and-path projects (a few are cited near the end of this letter), and now is the right time to garner state and federal funding for such projects.

The Somerville Community Path (also known regionally as an extension of the Minuteman Trail) provides the logical connection to the City's neighbors to the east and west. Every improvement to the Community Path extension in its co-design with the Green Line extension maximizes the potential of our regional transportation

1

I-081-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-081-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-081-003

Please see response to Comment I-081-001.

I-081-003 resources.

We appreciate your consideration of these revisions to both the EIR and the subsequent final design:

REVISIONS TO Funding and Construction(followed by details):

I-081-004 · The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT.

· That to take full advantage of cost efficiencies and technical necessities, the Green Line and Community Path extensions will be funded and constructed together as a single project and must clearly be described as such by MassDOT.

I-081-005 · MassDOT should commit to work with the City of Somerville and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as an integral part of the Green Line extensions - as was done with Boston's 4.7mile long Southwest Corridor path as part of the Orange Line, and with the mile-long Linear Park as part of the Red Line from Davis Square to Alewife. (By comparison, the Community Path extension is about 2.5 miles.) Applications for funding should include Federal New Starts funding for allowed bicycle and pedestrian access costs

· As the location of the support facility is finalized, the route of the Community Path from Washington St. to Lechmere in Cambridge should be re-evaluated.

Details

Funding and the Importance of the Community Path extension – By acquiring federal funding for the Community Path in conjunction with the Green Line extension, both transit projects will benefit tremendously, with the added perk of creating additional design and construction jobs in the Commonwealth. By contrast, if funding for both transit projects is not sought concurrently, it will cost many times more to construct the Community Path as a separate project, in turn yielding the grim possibility that the Community Path extension may never get built.
We understand that the City of Somerville has about $3 million of the reportedly $15 - $20 million Community Path extension estimated cost.

The request for State and Federal transit funding is reasonable and appropriate, as follows:

· The Federal Transportation Act (FTA) has recently proposed a policy that "pedestrian improvements located within 1/2 mile and all bicycle improvements located 3 miles of a public transportation stop ... may be eligible for FTA funding" http://edocket.access.gpo.gov/2009/E9-27240.htm

· The Community Path - a mere 2 miles from Boston at it's current Cedar Street terminus - will provide desirable off-road bicycle and pedestrian access to the T stations, offering superior connections to the surround neighborhoods, especially in East Somerville - as in Davis Square, where 60% of the residents use public transportation and thousands walk and bike to the station each day. The Community Path will attract more T-riders in a very cost-effective manner. More T-riders means enhanced opportunities for getting federal New Starts and other federal funding.

· In

2

I-081-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-081-005

Please see response to Comment I-081-004.

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-081-005

the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is designed as an integral part of the station access. This will allow the public transportation success of the Davis Square station to be repeated in parts of Somerville that really need it.

REVISIONS TO DESIGN

Community Path from Lowell St. to Route 16: The MEPA certificate said that the environmental review would include evaluation of continuing the Community Path west of the Lowell St. station to Medford. The study results that were presented (Appendix E of the DEIR) concluded that the width of certain sections right-of-way was insufficient to provide such a continuous Path. However, since there are some sections where there isenough width, a route, path connections to local streets, can be studied further.

I-081-006

Community Path from Route 16 to West Medford: Section 3.2.3 of the RFP said that Vanasse Hangen Brustlin, Inc. (MassDOT / EOT's consultant)should study "Using the bikeway/pathway guidelines, consider options for providing pedestrian connections to the West Medford commuter rail station and evaluate the viability and potential impacts of including a community path in this section of the project area." This seems not to have been done but should be. Such a Path would make a transfer connection from Route 16 to West Medford. Therefore MassDOT should plan for a community path to connect the Route 16 terminus to West Medford via an overpass of Route 16, a bridge over the Mystic River and a route along the Lowell commuter rail tracks.

I-081-007

Access to Route 16 Station - The plans in the DEIR document do not show how Green Line riders will safely access the Route 16 station from Arlington and Medford and from the Alewife Brook paths that are being improved as part of a $3.6 million ARRA stimulus project. A multi-use path for pedestrians and bicyclists to the station should be included in the design from the Alewife paths to the station. Please request that MassDOT perform this design.

I-081-008

Community Path Route from Washington St. to Lechmere - the Somerville Community Path route should connect the Washington St./Brickbottom station, the Brickbottom community and Inner Belt to Lechmere. The present plans do not make these connections. If the proposed Yard 8 location for maintenance and storage facility is "dropped", better routes for the Community Path (such as along the Green Line to Brickbottom and over the former Red Bridge location) that do make these connections are possible. The Green Line extension plans should state that this re-evaluation will be done.

I-081-009

Bicycle Parking

- The amount of bicycle parking presently described in the plans (270 spaces) is welcome but will be insufficient for the expected number of bicyclist coming to the stations. 270 spaces is only about 1% of the expected ridership. Based on the present parking at Red line stations, bike parking at 3-5% of ridership will soon be needed. Therefore, we request that the amount of bike parking be increased to approximately 5% at the Union Square, Route 16 and Lowell St. (major intersection with Community Path) stations and 3% at the remainder.
- Also, the location of the bicycle parking (where specifically shown in the plans) are good at some locations but not at others. The bicycle parking locations should be as close to as possible to the entrance and in well lit and safe locations.
- Lastly, bicycle parking should be covered parking if at possible.

Improved pedestrian and bicycle

3

I-081-006

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16 and related station access issues. Connections to West Medford and the existing commuter rail station can be specifically evaluated at that time. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-081-007

Please see response to Comment I-081-006.

I-081-008

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the

I-081-010

access
Pedestrian connections to some of
the stations could be better designed. Access to some of the stations could be vastly improved by having more thanone entrance or access pointsuch as:

· a
direct connection from the Gilman Square station to the Somerville High School/Library/City Hall complex)

· the
Washington St. station design which seems particularly poor in this regard for riders coming from the west and north. This could be greatly improved by locating the station directly above Washington St. where direct access via elevator would be possible (earlier designs included such a layout).

· In
general, pedestrian and bicycle access should be given higher priority in these "community-based" station designs that motor vehicles connections.

· station
designs (specifically College Ave and also Washington St.), where drop-off stops ("kiss and ride"), directly blocks the front of the T-station entrance and will congest entrance to the station. Paradoxically, pedestrian access to the station entails a long, complicated route.

· Lowell St. station, where a direct connection to the
platform from the Path coming from Cedar St. would be possible via a safe pedestrian crossing of one track. MassDOT has said this would not be allowed because of safety concerns even though every light rail system in the US (including in Boston: Longwood stop on the Green Line and Milton and Butler stops on the Mattapan line) allows crossing of tracks for access. Even if MassDOT will not allow this access point at this time, the Lowell St. station platform should be designed for such future access.

We look forward to seeing these revisions incorporated into the EIR and the subsequent final design.

Here are just a few local and national precedents for successful rail-with path projects:

PRECEDENTS FOR RAIL-WITH-PATH PROJECTS
There are at least two precedents
in the Boston area for rail transit with community paths with both constructed by MBTA and funded with state and federal funding:
Ø The
Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
Ø The
Southwest Corridor Path in Boston alongside and over the Orange Line

Additionally, there are many recent examples of paths being
built together with mass transit expansions around the nation:
· The
Capital Crescent trail alongside the planned light-rail Purple Line in suburban Washington DC includes trail construction is part of the project and the cost estimates that will be submitted for New Starts funding from the federal government.
http://purplelinemd.com/images/stories/purpleline_documents/deis/deis/10_chapter5.pdf
http://purplelinemd.com/images/stories/purpleline_documents/deis/Conceptual%20Plans%2009%202008.pdf

4

Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-081-009

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-081-010

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

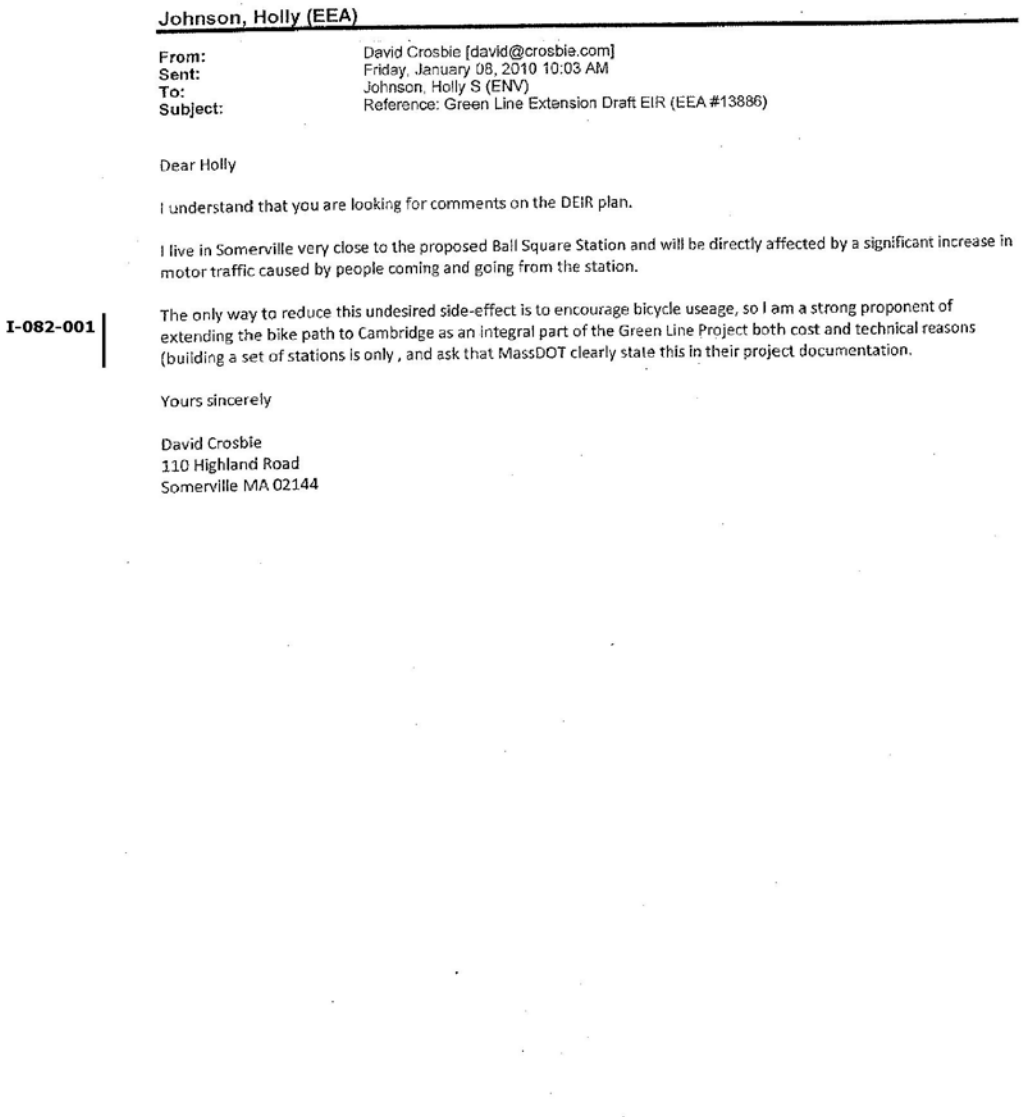
In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

- Bicycle
and pedestrian path alongside the light-rail Expo line in Los Angeles:
http://buildexpo.org/gallery.php
http://metro.net/projects_programs/exposition/feis.htm
- A
world-class bikeway was built alongside and integrated with stations on the
14-mile Orange Line BRT corridor in LA:
http://www.streetfilms.org/las-orange-line-bus-rapid-transit-plus-bike-path/

The Somerville Community Path is a critical piece of the
following regional and State-wide bicycle and greenway plans.
Ø The
Massachusetts Bicycle Transportation Plan (page 30 and 45 and Figure 4):
http://www.massbikeplan.org/_docs/Massachusetts%20Bicycle%20Plan%20with%20Links%20to%20Graphics.pdf
Ø The
Somerville Community Path as part of the critical 104-mile east-west Mass
Central Rail Trail (Figures 4.1 and 4.2).http://www.masscentralrailtrail.org/
Ø The
City of Somerville's Open Space and Recreation plans list the Community Path
Ø The Mystic Valley Case Statement for Active
Transportation for the Mystic River Communities:
http://www.railstotrails.org/resources/documents/whatwedo/case_statements/Vision%20for%20July%2010th%20draft.pdf
Ø The
2007 MAPC Regional Bicycle Plan -
http://www.mapc.org/transportation/trans_alternatives/Bike_plan_PDFs/Bike_Plan_FINAL_version_3-14-07.pdf

In summary, we encourage you to:1) request that MassDOT incorporate these revisions into
the EIR and the subsequent final design, 2)request thatMassDOT seek federal funding for the Community Path extension
as an
integral part of the Green Line Extension, and 3) ensure that Citizens a
Advisory Committee public process be instituted to help guide these necessary
design improvements. These crucial
revisions relating to the Community Path as it is co-designed with the Green
Line extension will help bring our regional transportation resources closer to
their full potential.

Thank you.
Gerry Cronin.
19 Willoughby Street
Somerville



Johnson, Holly (EEA)

From: David Crosbie [david@crosbie.com]
Sent: Friday, January 08, 2010 10:03 AM
To: Johnson, Holly S (ENV)
Subject: Reference: Green Line Extension Draft EIR (EEA #13886)

Dear Holly

I understand that you are looking for comments on the DEIR plan.

I live in Somerville very close to the proposed Ball Square Station and will be directly affected by a significant increase in motor traffic caused by people coming and going from the station.

I-082-001

The only way to reduce this undesired side-effect is to encourage bicycle useage, so I am a strong proponent of extending the bike path to Cambridge as an integral part of the Green Line Project both cost and technical reasons (building a set of stations is only , and ask that MassDOT clearly state this in their project documentation.

Yours sincerely

David Crosbie
110 Highland Road
Somerville MA 02144

1

I-082-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

Johnson, Holly (EEA)

From: Sam Crosbie [scrosbie@walshbrothers.com]
Sent: Friday, January 08, 2010 8:05 AM
To: 'holly.s.johnson@state.ma.us'
Subject: Green Line Extension DEIR comment letter
Attachments: Green Line Letter.pdf

Please see attached letter with my comments on Green Line Extension DEIR.

Thank you,

WALSH BROTHERS **Sam Crosbie, LEED AP** | Assistant Project Manager

DFCI YCCC | 1 Jimmy Fund Way | Boston, MA 02115 | T. 617.293.7885 | www.walshbrothers.com

January 8, 2010

RECEIVED
JAN 8 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I am writing as a unit owner and resident of the Glass Factory Condominiums at 169 Monsignor O'Brien Hwy, Cambridge. I am concerned with the current design and location of the new Lechmere Station and extension of the Green Line and its proximity to my residence.

My unit is on the 3rd floor, facing what is to be (hopefully) North Point Development. If this design is not handled with the proper care, the quality of life of myself and all residents facing this direction will be negatively impacted both financially and mentally. Noise, vibration, light pollution, and limited daylight views are of great concern if the tracks and station are not held as far back as possible from our building. These tracks should and could be designed to be on the far side of the current fence separating the glass factory from the existing maintenance facility. Also making the elevated tracks with as small a profile, and as low to the ground as possible through this section would help alleviate some issues.

I-083-001

I ask that additional attention be paid to the needs of the current residents of our building and that as much 'green' buffer space as possible between the building and new facility is maintained. If designed the right way, with the needs of the area's impacted population taken into consideration, this project could be a boon to North Point and the whole area. There is no reason for this project to not increase our quality of life, not to mention property values, if our concerns are listened to and adequately incorporated into the project development.

I-083-002

Thank you for your consideration.

Sincerely,

Sam Crosbie
169 Monsignor O'Brien Hwy
Unit 308
Cambridge, MA 02141

I-083-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-083-002

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

Johnson, Holly (EEA)

From: Courtney Croteau [courtney.croteau@gmail.com]
Sent: Monday, December 28, 2009 10:15 AM
To: Johnson, Holly S (ENV)
Subject: Regarding EEA #13886 Green Line extension DEIR

Secretary Ian Bowles/Holly Johnson
MEPA Analyist

Dear Secretary Ian Bowles,,

The community members engaged with CCP would like to see all decisions related to the planning of the Green Line and the land use in the ¼ mile areas around the 7 proposed stations to reflect this list of Corridor Core Principles. Please see third paragraph for list of Core Principles and corresponding suggested changes to Draft Environmental Impact Report (DEIR).

The Community Corridor Planning project, a grassroots effort to engage community members in the land use planning along the Green Line extension, has brought together hundreds of people to frame a list of core principles to guide their recommendations for land use along the extension in upcoming months. We ask that these principles be taken into consideration as the Mass. Department of Transportation finalizes its Environmental Impact Report.

Core Community Principles for
Neighborhood Development Along the Green Line Corridor

I-084-001 ? More Local Jobs: We want a fixed percentage of respectable jobs of all types with good wages and benefits for Somerville residents, from construction to permanent.

I-084-002 ? Increase Commercial and Economic Development: We want to see the creation of squares as destinations, with careful attention to mixed use of commercial/residential, reuse of buildings, and economic development to increase the tax base.
o Draft Environmental Impact Report (DEIR) does not address Department of Transportation (DOT) commitment to economic development
o New MA DOT is supposed to work with Secretary of Economic Affairs to promote station location and design that promotes economic development and the community needs to show MA DOT how to do this ? to change the paradigm pro-actively.

I-084-003 ? Improve the Green Environment: We want a safe, environmentally friendly neighborhood with more green space, trees, and gardens; reduction of noise; avoidance of light pollution; and prevention of toxic chemicals in the air.
o Response to DEIR: Given this principle, it is important that more attention be given to:
I-084-004 o Noise of operations
I-084-005 o Mitigation during construction for noise, vibration, etc.
I-084-006 o How close the tracks will be to the Brickbottom Building and other buildings along the right of way
I-084-007 o The need to involve neighborhoods affected regarding noise and vibration
I-084-008 o Recommendation that testing be done immediately after project begins to determine if estimates for vibration and noise done for the DEIR are accurate.
I-084-009 o Possibly transfer at Ball Square but only if Commuter rail is electric not diesel because of the pollution it would create for neighbors
o Rep. Provost noted in comments made that diesel trains should not stop in Somerville. This should only be permitted if trains are electrified

1

I-084-001

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR Section 5.3, Socioeconomic Impacts. As required by the Secretary's Certificate on the DEIR, additional analyses of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A project workshop series will provide an opportunity to discuss broader impacts of the project on job creation, economic development, housing affordability, and other community impacts.

I-084-002

Anticipated indirect and cumulative effects of the Project, including impacts on corridor transportation and traffic, growth, property values, land use, transit-oriented and economic development are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects. As stated in FEIR Section 6.4, MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. These workshops will offer an opportunity to discuss how facility design can influence indirect and cumulative effects. The stations have been designed to meet MBTA standards, as well as to be ADA-compliant.

I-084-003

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-084-010 o Consider dual-mode conversion of existing commuter trains

I-084-011 ? Encourage Walking and Biking: We want to encourage walking and cycling, through safe, bike/pedestrian friendly design of streets and paths around and between stations.

I-084-012 o Pedestrian accessibility is poor for the station designs in the DEIR
o The design required in the MEPA Scope (EENF) does not sufficiently address the detailed concerns and requirements for each station.
o In the DEIR design and engineering is insufficient for moving the project to a final EIR because of a range of unaddressed issues (i.e., station design, siting, bike parking, community path integration)

I-084-013 o Bike access and bike parking at all stations needs to be improved.

I-084-014 o New Light Rail Vehicles (LRVs) should be designed to accommodate bicycles (like Portland LRVs)

I-084-015 o The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

I-084-016 ? Create Community Gathering Spaces: We want both indoor and outdoor safe, public gathering spaces for community members.

I-084-017 ? Improve Access: We want above standard, safe access to and between stations for people with disabilities, strollers, and pedestrians in general

I-084-018 ? Community Involvement: We want to make sure residents are included on an ongoing basis in the planning, design, and zoning changes to the stations and areas around them. Youth, artists, and others should help design stations, with attention to amenities. We need an easy and clear process for residents to address problems as they come up, with ways of immediately resolving unseen impacts.
o Ongoing Community participation in the next phase (presumed to be done as a design/build project) is necessary
o Public involvement will help to keep decision-making public (transparency)
o Need to have a field office that residents can go to with concerns on an ongoing basis
o Need neighborhood based community groups to be involved in planning around each station,

I-084-019 ? Connecting Buses and Trains: We want to ensure inter-modal access between neighborhoods and stations, for new train service to be adequate and speedy, and for existing bus lines to continue to serve areas not connected by train.

I-084-020 o Need opportunity for future connection with other lines, such as Red Line at Porter Square.
o Several stations do not show bus stops, or nearest bus stop is located outside of station. Would be helpful to design station and alter bus route to allow for stops at the stations.

I-084-021 ? Keep and Add Local Businesses: We want locally owned, culturally diverse, clean businesses in commercial areas with employees who live in Somerville.

I-084-022 ? Keep Somerville Affordable: We want to make sure people of all economic means have the ability to afford housing and living costs, so that Somerville residents, such as child care workers, cab drivers, local business employees and others can stay here affordably.

? Maintain Our Diversity: Preserve and encourage economic and ethnic diversity of residents and businesses.

I-084-023 The state needs to plan all transportation projects on the basis of guiding principles for Transit Oriented Develoment (TOD), smart growth and quality of live impacts. For example, TOD and land use are the planning and organizing focus of the South Coast Rail project, but

2

As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR. Project mitigation measures required by the Secretary's Certificate on the DEIR/EA Certificate are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-084-004

DEIR/EA Sections 5.7, Noise, and 5.8, Vibration, describe the noise and vibration impacts, respectively, expected from the Project. Pursuant to FTA-established guidelines, these impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments, describes the mitigation measures that would be implemented to eliminate, minimize, or offset impacts above regulatory thresholds.

I-084-005

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

I-084-006

The precise alignment for the Green line Extension tracks near the Brickbottom Artists Building and neighboring structures will be determined during preliminary engineering and final design. The Medford Branch tracks will be located as far from the building as possible, with a minimum clearance between building and tracks of about 15 feet. The

I-084-023 have been ignored in the Green Line extension planning despite the requirement by the Secretary to address these concerns in the EENF.

Courtney Croteau
7 Craigie Terrace
Somerville, MA 02143

Fitchburg Branch will be further from the building, with a minimum clearance between building and tracks of about 25 feet.

I-084-007

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-084-008

FEIR Section 8.1 discusses the plan for noise and vibration monitoring once the Green Line Extension is operational. As was done for the Greenbush Line, the MBTA will monitor noise and vibration after service starts to determine the actual noise levels caused by the Green Line Extension and the relocated commuter rail. If the actual levels are found to be higher than the projections, the MBTA will investigate the cause and take appropriate corrective action. It is worthwhile to note that when conducted for the Greenbush Line, projections were based on measurements of actual MBTA commuter rail trains. Measurements conducted after the Greenbush Line began operating showed that there were no locations where actual noise levels exceeded the pre-construction modeled levels.

I-084-009

Opportunities for a shared station between the Green Line Extension (on the Medford Branch) and MBTA Commuter Rail were evaluated for the Project. This connection was ultimately dismissed, as described in DEIR/EA Section 3.3, and Appendix B. While the potential for a joint

station at Union Square would need to be studied further, it is not currently part of the Proposed Project. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain. However, as the Project advances into preliminary engineering, opportunities for future additions and extensions of service will be considered.

I-084-010

The potential future electrification of MBTA Commuter Rail lines in the Study Area is beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail.

I-084-011

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary’s Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT’s plans for public outreach in the next phases of the Project.

I-084-012

The DEIR/EA and FEIR include conceptual Project designs. Designs for each station, the storage and maintenance facility, and the entire project alignment will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-084-013

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-084-014

As stated at http://www.mbta.com/riding_the_t/bikes/, only folding bicycles are authorized on the existing Green Line. MBTA bicycle access policies will apply to the Green Line Extension. Secure bicycle parking will be provided at each Green line Extension station to promote convenient bicycle access.

I-084-015

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-084-016

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-084-017

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-084-018

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-084-019

To the extent possible, Green Line Extension stations will be designed

for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-084-020

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-084-021

Projects impacts on locally-owned businesses would be considered indirect and cumulative impacts. Anticipated indirect and cumulative effects the Project, including impacts on corridor transportation and traffic, growth, property values, land use, transit-oriented and economic development are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects.

I-084-022

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. A project workshop series will provide an opportunity to discuss broader impacts of the project on job creation, economic development, housing affordability, and other community impacts.

I-084-023

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Johnson, Holly (EEA)

From: David and Jane [davdjans@rcn.com]
Sent: Sunday, January 03, 2010 3:14 PM
To: Johnson, Holly S (ENV)
Subject: EEA number #13886: Testimony on Draft EIR for Green Line Extension Project

January 3, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office, Attn: Holly Johnson, MEPA Analyst EEA number #13886 100 Cambridge Street, Suite 900 Boston MA 02114

Via e-mail: holly.s.johnson@state.ma.us

Re:
* Draft Environmental Impact Report/Environmental Assessment (DEIR/EA).
* Draft Section 4(f) Statement for the Green Line Extension Project.
* Additional Maintenance Facility Alternatives Analysis.

Dear Secretary Bowles:

I wish first to thank the Commonwealth for extending the Green Line into Somerville, a project long overdue. I believe that a Final Environmental Impact Report should be produced in order to deal with the following issues, among others:

I-085-001

1. The current DEIR does not present enough details about the stations' designs to allow readers to evaluate the stations' compliance with the Americans with Disabilities Act (ADA). This is a major concern, because the MBTA has been ordered by the courts to retrofit existing stations to meet ADA requirements.

I-085-002

2. The Executive Summary takes the position that the presence of the Green Line in Somerville will not increase economic activity, only change the location of infill development. The history of Harvard Square, Porter Square, and Davis Square suggest that this is short-sighted. The areas around all of these Red Line T-Stops enjoyed significant increases in property value and economic activity in the years after the Red Line came in.

Somerville has little undeveloped land, and much of the developed land is residential. Residential land is difficult to repurpose without disrupting the neighborhood. However, some of the proposed T-stops, such as the Lowell Street and Brickbottom stops, are near old industrial sites that could be easily converted into high-value office and R&D development. The MBTA should include in the Final EIR an assessment of the economic development potential of each proposed T-Stop, including the implications for each city's tax base.

I-085-003

3. The proposed Maintenance Facility should not be placed at Yard 8. In that position it would not only disrupt the lives of the Brickbottom residents, it would permanently cut off significant parts of the Inner Belt area and make economic development there very difficult, to the sure detriment of the Somerville tax base. Please consider placing the Maintenance Facility in a location detached from all future development, such as under the I-93 right-of-way. If this is not feasible, the Facility should be placed at the better of Option L and Mirror H (see #4).

I-085-004

4. The Maintenance Facility Alternatives Analysis presented by the T is significantly flawed.

a. Ability to Meet Project Schedule: The analysis gives a +1 to Yard 8 because design work has already been done. This is misguided for two reasons.

I-085-001

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-085-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR

I-085-004

First, it sets a bad precedent. The MBTA should have informed the community and listened to their response before making a decision as important as placing the Maintenance Facility at Yard 8. By this precedent, any project, no matter how poorly conceived, could be forced through simply by investing in design work before informing the community.

Second, this analysis assumes that the Brickbottom residents are complaisant, which they obviously are not.

I am not a lawyer or a Brickbottom resident, but it seems to me that if this issue went to court, the Brickbottom residents would have a strong case. They would have legal standing as direct abutters, they would be uniquely damaged by the Yard 8 development, and they would have opposed the development at every opportunity.

Statements I have heard in public meetings imply that the Brickbottom residents have already sought legal advice. If the MBTA went forward nonetheless, the residents would almost certainly go to court to block the development and would almost certainly win the case on its merits.
Yard 8 should be given a -1 for this reason. It would be very optimistic even to give it a 0.

b. Operational Impacts: According to the analysis, Option L (and Yard 8) would affect Pan Am Railway's operations, but only to the extent that the railway would have to start using the seldom-used, but existing, Yard 10 lead. This minimizes the operational impact of both, which should have 0 instead of -1.

c. Future Vision Transportation Access: According to the analysis, Option L provides a direct connection to the Union Square branch, which neither Yard 8 nor Mirror H provide. This is important for future transportation access. It has been proposed that the Union Square spur be extended through South Somerville to Porter Square, which along with the Medford branch would place a T-stop within a quarter mile of almost every part of Somerville, as well as parts of northeast Cambridge.
Option L should be given a +1 for this unique advantage.

The updated scores are:

* Yard 8 = -1
* Mirror H = -3
* Option L = +2

I-085-005

5. In public meetings I have attended as part of the Green Line Community Corridor process, a consistent theme has been apprehension that the Green Line extension would harm existing Somerville neighborhoods. To mitigate this problem, the MBTA should support public advisory committees for each T-Stop that could work with the T and residents to meet neighborhood concerns. Later, these advisory committees could also coordinate economic development around each T-Stop, as was done by the Davis Square Task Force after the Red Line came into Davis Square.

I-085-006

6. A long-standing problem with the Commuter Rail service is that the trains are diesel powered. Diesel engines produce large amounts of fine particulates that pollute the air in nearby, densely-populated neighborhoods, damaging the hearts and lungs of residents. Converting commuter rail trains to dual-mode diesel and overhead electric would significantly reduce this burden.

To support the Green Line Extension, the T is already required to erect pylons and catenaries. Please consider placing the pylons so that they will span both the Green Line and Commuter Rail tracks, or at the very least consider moving the Commuter Rail tracks to a location that would allow room for a pylon between them and the wall. Doing this would make

Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-085-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-085-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-085-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-085-006

The potential future electrification of MBTA Commuter Rail lines in the Study Area is beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail.

I-085-006 it much easier to add catenaries over the Commuter Rail tracks and electrify the Commuter Rail trains at a later date.

I-085-007 7. Many of the stations seem to be accessible only from one side of the street and thus do not adequately integrate with the adjoining neighborhoods. This has implications for ADA compliance as well as for conformity with urban design principles. Apparently this is because the standard station design consists of a large enclosed space at street level connecting to a center platform below. This large enclosed space would be very expensive to provide on both sides of the street.

A less expensive alternative design could consist of 2 columnar enclosures, one on each side of the street. Each enclosure could contain an ADA-compliant elevator surrounded by a stairway down to platform level. At platform level, these could be connected by a heated enclosure passing under the street. The heated enclosure could change to a semi-enclosure with infrared heating extending away from the street in both directions along the platform. This design would allow vulnerable riders to stay in the heated enclosure under the street and less vulnerable riders to move away from the center as more riders arrived.

I-085-008 8. Somerville and Medford are densely-settled inner suburbs, not sparsely-settled, car-oriented outer suburbs. The majority of the riders will be reaching the T-stops on foot. It is neither necessary nor appropriate to provide parking or extensive drop-off facilities for these T-Stops, particularly those not termini. The resources saved should be diverted to the Community Path and to neighborhood integration.

Despite my concerns, I feel that the Green Line Extension is an exciting development and I look forward to the day it is complete. Thank you for providing this opportunity to comment.

Sincerely,

David Dahlbacka

25 Hancock Street
Somerville MA 02144
home: 617-776-0945
cell: 617-852-3522
web: www.whyisthisimportant.net

I-085-007

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-085-008

The only Green Line Extension station that will provide parking is Lechmere Station. Drop-off and pick-up areas will be provided at at several stations. These will accommodate expected kiss-and-ride activity.

Johnson, Holly (EEA)

From: Maria Daniels [maria.daniels@gmail.com]
Sent: Friday, January 08, 2010 4:53 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886. DEIR for Green Line Extension

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us

Dear Secretary Bowles,

I am writing to comment on the DEIR for the Green Line Extension, EEA #13886. I live on West Street in Medford Hillside.

The College Avenue station would not serve my neighborhood. The Route 16 station would serve my neighborhood, and would have many more environmental benefits in reducing car traffic and reducing air pollution.

I-086-001 I am very disappointed with the decision in the DEIR to put a terminus at College Avenue for any length of time, with the decision in the DEIR to delay the extension to Route 16 to a later phase. Instead of serving Medford Hillside, these decisions will burden Medford Hillside with increased traffic congestion, increased pollution, and more years of construction impacts. These decisions are at odds with the requirement in the Secretary's Certificate to maximize the benefits of the project. Please reject this version of the DEIR and require MassDOT to build the full Green Line Extension to Route 16 by December 2014.

I-086-002

Thank you,
Maria Daniels
617-331-7331

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I-086-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-086-002

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

January 3, 2010

Exec Ofc of Energy and Environmental Affairs
MEPA Ofc
Attn: Holly Johnson, MEPA Analyst
EEA # 13886
100 Cambridge St, Suite 900
Boston MA 02114

Dear Secretary Bowles,

The Green Line Extension Project holds much promise. The people of Somerville deserve to have a considerate, [illegible] that enhances the potential for economic development within the Inner Belt and Brickbottom Districts and the rejoining of the neighborhoods already divided by the intrusion of the McGrath and O'Brien Hgwy access to Rt 93.

I-087-001 The placement of the Heavy Maintenance Facility and storage of 80 trolley cars (accommodating the ENTIRE Green Line, not just the Extention) in the Yard 8 location does NOT do that. As a resident artist at the Brickbottom Artists Building for 15 years I strongly urge a far more creative resolution to the placement of those entities than to put them directly by our community. All the citizens of Somerville deserve better.

Please give genuine, VISIONARY consideration to '…a complete analysis of both alternatives ' including Mirror Scheme H and Option L, that…'will be performed over the next several weeks.' (ES-22/23, 10-15-09).

I-087-002 I have a particular concern regarding the toxic brown fields within the entire Extension landscape, and the potentially severe health impact of the disruption of that soil. Before one piece of excavation equipment begins its work, I request that specific mitigation plans be presented, discussed with the communities involved, and IMPLEMENTED. In the Executive Summary (Hazardous Material and Solid Waste, ES-51) reference is made to 'Procedures should protect both workers and nearby receptors.' Would we, the people living in the area, be the 'receptors'?

I-087-003 Could the space required for 100 Green Line Extension employee cars be placed in a garage built to accommodate both the Commuter Rail Maintenance Facility and Green Line Extension employ parking on land already used for parking? This would then accommodate a realignment of the proposed Option L, to avoid dislocation of existing businesses in that area (inner Belt). It would also allow for a reconfiguration of the trolley storage area.

With due appreciation for the vast amount of work that has been done in preparation for the Green Line Extension, I do hope that the long term social, economic, and health impacts of the final decisions will reflect the best technology, thinking, planning, and execution that this new century can offer, and not the scattered remains of the last.

Regards,

M Susanna Darling
1 Fitchburg St #C505
Somerville MA 02143
617-625-7587

I-087-001

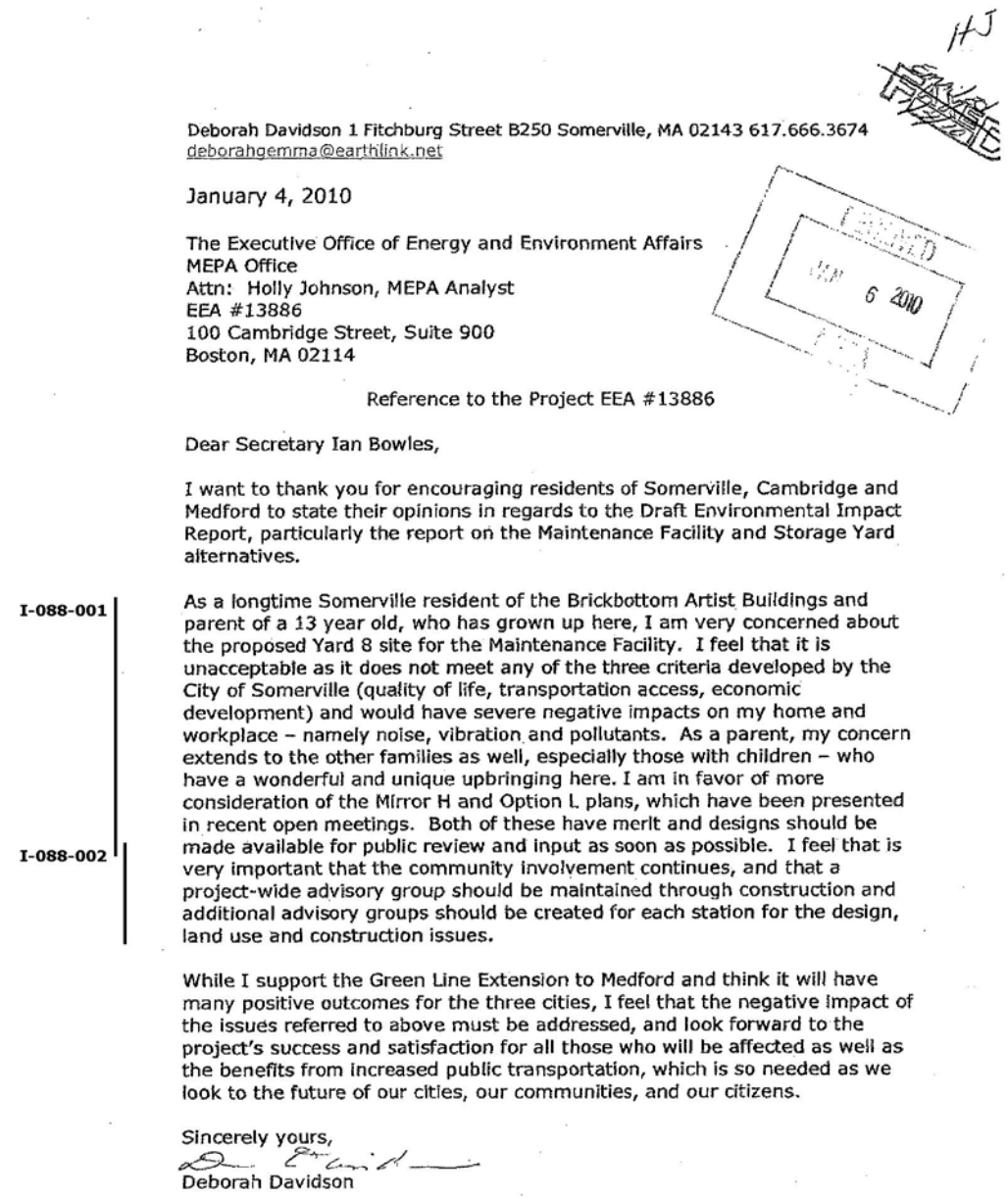
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-087-002

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

I-087-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site. Consideration of employee parking options for the Option L site maintenance facility will be made during preliminary engineering.



Deborah Davidson 1 Fitchburg Street B250 Somerville, MA 02143 617.666.3674
deborahgemma@earthlink.net

January 4, 2010

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Reference to the Project EEA #13886

Dear Secretary Ian Bowles,

I want to thank you for encouraging residents of Somerville, Cambridge and Medford to state their opinions in regards to the Draft Environmental Impact Report, particularly the report on the Maintenance Facility and Storage Yard alternatives.

I-088-001

As a longtime Somerville resident of the Brickbottom Artist Buildings and parent of a 13 year old, who has grown up here, I am very concerned about the proposed Yard 8 site for the Maintenance Facility. I feel that it is unacceptable as it does not meet any of the three criteria developed by the City of Somerville (quality of life, transportation access, economic development) and would have severe negative impacts on my home and workplace – namely noise, vibration and pollutants. As a parent, my concern extends to the other families as well, especially those with children – who have a wonderful and unique upbringing here. I am in favor of more consideration of the Mirror H and Option L plans, which have been presented in recent open meetings. Both of these have merit and designs should be made available for public review and input as soon as possible. I feel that is very important that the community involvement continues, and that a project-wide advisory group should be maintained through construction and additional advisory groups should be created for each station for the design, land use and construction issues.

I-088-002

While I support the Green Line Extension to Medford and think it will have many positive outcomes for the three cities, I feel that the negative impact of the issues referred to above must be addressed, and look forward to the project's success and satisfaction for all those who will be affected as well as the benefits from increased public transportation, which is so needed as we look to the future of our cities, our communities, and our citizens.

Sincerely yours,

Deborah Davidson

I-088-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-088-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

Johnson, Holly (EEA)

From: Marc Davidson [marcrdavidson@mac.com]
Sent: Wednesday, December 30, 2009 12:47 PM
To: Johnson, Holly S (ENV)
Subject: Green Line to Medford

I-089-001

Dear Secretary Bowles,
I strongly believe that the Green Line terminus at College Ave. does not satisfy the obligation by the state to the residents of Medford Hillside. This is not a compromise solution but rather a dramatic cutting back of an already scaled-back project. The alternative, a terminus at Rt. 16, as proposed by, among others, the MGNA would have a much better cost to benefit in terms of environmental impact and increasing ridership on the T. Please reconsider the parts of the DEIR that limit the extension of the Green Line to College Ave.
Regards
Marc Davidson
63 West St.
Medford

I-089-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-090-001

Please see Comment Letter I-002.

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles:

I-090-001

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I strongly support the Green Line extension, and urge that it be built in the most efficient and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and to require further environmental analysis of the project by MassDOT:

A two-phased approach is not the most efficient. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, the Route 16 station may never be built.**

Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized

station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Cornelia Davis

Cornelia Davis
28 Butler St.
Medford, MA 02155

Johnson, Holly (EEA)

From: Jeffrey.Davis@ey.com
Sent: Wednesday, January 06, 2010 8:25 PM
To: Johnson, Holly S (ENV)
Subject: Fw: Scan from a Xerox WorkCentre
Attachments: DOC001.PDF

Holly,

Please see my letter below expressing my concern regarding the green line extension which will effect the value and livability of my unit of the Glass Factory Condominiums in East Cambridge.

I appreciate your consideration of my concerns.

Regards,

Jeff

Ernst & Young ®
Ernst & Young LLP
Jeff Davis Financial Services

200 Clarendon Street, Boston, MA, 02116, USA
Tel: +1-617-375-1414 Fax: +1-866-614-7425
www.ey.com

----- Forwarded by Jeffrey Davis/Assurance/AABS/EYLLP/US on 01/06/2010 08:23 PM -----

From: mfd@ey.com
To: "jeffrey.davis@ey.com " <jeffrey.davis@ey.com>
Date: 01/06/2010 08:22 PM
Subject: Scan from a Xerox WorkCentre

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre.

Sent by: Guest [mfd@ey.com]
Number of Images: 2
Attachment File Type: PDF

WorkCentre Location: Room 45019 Boston
Device Name: 45_45019_XEROXWC5655
Device Serial Number: 0000000000

Have a nice day

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Ernst & Young LLP

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I-091-001

Please see Comment Letter I-013.

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-091-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Signature

Jeffrey Davis
Print Name

169 Monsignor O'Brien Hwy #209
Address
CAMBRIDGE, MA

Johnson, Holly (EEA)

From: Keelin Deasy [caoileann@gmail.com]
Sent: Friday, December 11, 2009 1:12 PM
To: Fichter, Katherine (DOT)
Cc: Johnson, Holly S (ENV)
Subject: Fwd: Green Line Extension - 616-624 Boston Ave, Powderhouse Condos Green Line Extension Concerns

Note - apologies for the bounceback - I misspelled Ms Fichter's name.

Dear Secretary Bowles, Ms Ficher, and Ms Johnson,

I-092-001 This email (and forthcoming letter) is to express my concerns along with the other occupants at the Powderhouse Condos at 616-622 Boston avenue in Medford. The DEIR cannot be the final draft - it is too inadequate. I am asking by law that the MEPA process continue until a acceptable final draft with futher analysis has been completed.

My concerns are noted as follows:

I-092-002 Firstly, there are no proposed sound barriers at the Powerhouse complex. I can see one is to be setup on the other side of the tracks, how can only one side get this treatment? There trains will run approximately 20 feet or less outside our back door and having no sound barrier in place on our side of the track is unacceptable! I am not sure how the surveyors would overlooked this complex. Sound barriers absolutely need to be provided.

I-092-003 Secondly, the traffic at the Boston Ave/Harvard Street and Boston Ave/ Broadway Street intersections is bad enough as it is, therefore no parking should be built and allowed at the Ball Square station nor any other interior station. The current conditions cannot withhold any more traffic and this also undermines the purpose getting the local communities to use public transportation. Davis, Porter and Harvard Squares. Located closeby do not have dedicated parking facilities and these stations function very well.

I look forward to hearing from you.

Kind regards

Keelin Deasy

622 Boston Ave, Apt 7E, Medford, MA 02155.
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::.Caoileann.::

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::.Caoileann.::

I-092-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-092-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies. During preliminary engineering, MassDOT will conduct further analysis for several individual properties. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts.

I-092-003

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. With the exception of replacing the existing parking at Lechmere Station, no station parking is planned at any of the proposed Green Line Extension stations. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

HJ

Keelin Deasy
622 Boston Ave, Apt 7E,
Medford, MA 02155.

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Ofice,
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02144



Cc: Ms Holly Johnson and Ms Katherine Fichter

December 11 2009

Re: Green Line Extension Concerns - 616-624 Boston Ave, Powderhouse Condos

Dear Secretary Bowles, Ms Fichter, and Ms Johnson,

Per my email dated December 11 2009, this letter is to express my concerns along with the other occupants at the Powderhouse Condos at 616-622 Boston Avenue in Medford. The DEIR cannot be the final draft - it is too inadequate. I am asking by law that the MEPA process continue until a acceptable final draft with further analysis has been completed.

My concerns are noted as follows:

Firstly, there are no proposed sound barriers at the Powerhouse complex. I can see one is to be setup on the other side of the tracks, how can only one side get this treatment? There trains will run approximately 20 feet or less outside our back door and having no sound barrier in place on our side of the track is unacceptable! I am not sure how the surveyors would overlooked this complex. Sound barriers absolutely need to be provided.

Secondly, the traffic at the Boston Ave/Harvard Street and Boston Ave/ Broadway Street intersections is bad enough as it is, therefore no parking should be built and allowed at the Ball Square station nor any other interior station. The current conditions cannot withhold any more traffic and this also undermines the purpose getting the local communities to use public transportation. Davis, Porter and Harvard Squares. Located closeby do not have dedicated parking facilities and these stations function very well.

I look forward to hearing from you.

Thank you.

Kind regards,

Keelin Deasy

Johnson, Holly (EEA)

From: Chris DesAutels [desautels@gmail.com]
Sent: Thursday, January 07, 2010 9:03 PM
To: Johnson, Holly S (ENV)
Subject: Greenline DEIR

Dear Secretary Bowles,

I am writing to you with comments about the DEIR for the Green Line Extension Project. I would ask that you not accept this draft statement as a final EIR and ask MassDOT to further analyze several points which I believe are incomplete.

I-093-001 1. I support the Greenline continuing all the way to Route 16 in one Phase and building it without a parking structure. I believe Route 16 is the best location for a terminus stop and would serve the largest number of people. The two phase process proposed seems likely to result in an incomplete project and is likely to cost significantly more than if it was completed in one step.

I-093-002 2. The present DEIR presents a station design for Route 16 which is titled as a "Worst Case Design". MassDOT has acknowledged that there are better designs available, but for some unexplained reason they are not contained in the DEIR. A better design which does not take large amounts of commercial property should be included in the Final EIR. There are several ways to do this and not evaluating them is unacceptable. An alternative design would maintain the tax commercial base of the city, reduce the cost of the project, and result in a better end product.

I-093-003 3. The proposed temporary use of College Ave as a terminus must be evaluated. Without any assurance that the second phase of this project will ever get completed we would be left with a terminus station in a location which is not appropriate, and which has not been planned for in the EIR. The present DEIR does not describe how College Ave would function as a terminus location or what the impact of this station would be. I live very near to this station and if it is going to be the terminus on either a temporary or (more likely) permanent basis, it should be planned and evaluated in that manner so that proper mitigation can be done.

I appreciate your consideration. Again, I would encourage you not to accept this DEIR as Final until these significant considerations are dealt with.

Thank you.

Christopher DesAutels
21 Knollwood Rd
Medford, MA 02155

1

I-093-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-093-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-093-003

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch.

Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

Johnson, Holly (EEA)

From: Jenn DesAutels [jenn.art@gmail.com]
Sent: Thursday, January 07, 2010 9:17 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension DEIR

Dear Secretary Bowles,

I-094-001 Please reject the draft statement as a final EIR. MassDOT needs to conduct further analysis to address the following concerns:

1. The two phase process proposed seems likely to result in an incomplete project and is likely to cost significantly more than if it was completed in one step.

I-094-002 2. The present DEIR presents a station design for Route 16 which is titled as a "Worst Case Design". MassDOT has acknowledged that there are better designs available, but for some unexplained reason they are not contained in the DEIR. A better design which does not take large amounts of commercial property should be included in the Final EIR. There are several ways to do this and not evaluating them is unacceptable. An alternative design would maintain the tax commercial base of the city, reduce the cost of the project, and result in a better end product.

I-094-003 3. The proposed temporary use of College Ave as a terminus must be evaluated. Without any assurance that the second phase of this project will ever get completed we would be left with a terminus station in a location which is not appropriate, and which has not been planned for in the EIR. The present DEIR does not describe how College Ave would function as a terminus location or what the impact of this station would be. I live very near to this station and if it is going to be the terminus on either a temporary or (more likely) permanent basis, it should be planned and evaluated in that manner so that proper mitigation can be done.

I-094-004 4. I support the Green Line continuing all the way to Route 16 in one Phase and building it without a parking structure. I believe Route 16 is the best location for a terminus stop and would serve the largest number of people.

I appreciate your consideration. Again, I encourage you not to accept this DEIR as Final until these significant considerations are addressed.

Thank you.

Jennifer DesAutels
21 Knollwood Rd
Medford, MA 02155
781-393-1813

--
Jennifer Cheng DesAutels
Illustrator
http://jedillustration.servehttp.com
Illoblog: http://jenn-art.blogspot.com

1

I-094-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-094-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

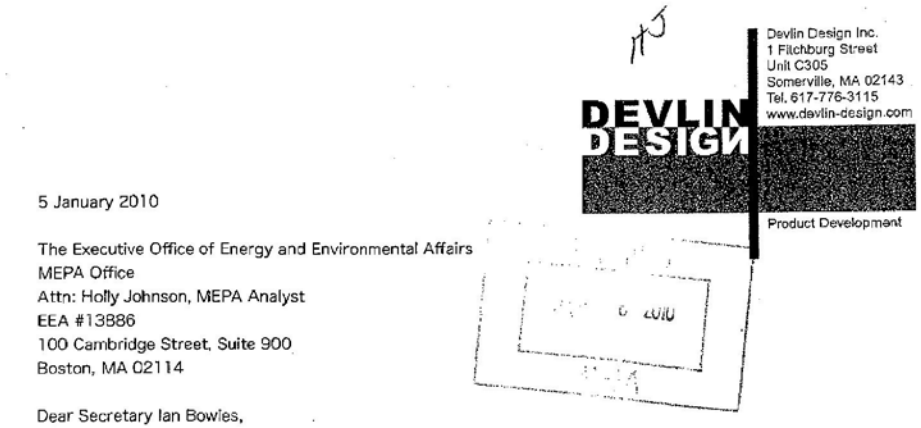
I-094-003

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch.

Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-094-004

Please see response to Comment I-094-001.



DEVLIN DESIGN

Devlin Design Inc.
1 Fitchburg Street
Unit C305
Somerville, MA 02143
Tel. 617-776-3115
www.devlin-design.com

Product Development

5 January 2010

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

Before 1950, the Brickbottom district of Somerville was a vibrant community of immigrants. It was a close-knit family atmosphere. Then the McGrath Highway overpass was built, and it choked off the neighborhood from the rest of the city. Slowly, the neighborhood died, and row houses gave way to warehouses and a garbage transfer station.

When I moved in to Brickbottom in 1994, the last remaining brick building from that era was still standing. Sadly, a few years later, it was torn down. Now the only reminder of the old Brickbottom district is a map that is hanging in the Brickbottom Artists building showing the names and locations of all the families that lived here.

This area is prime location, very near downtown Boston, and the City of Somerville would benefit from a revitalization. The Brickbottom Building was the pioneering step for this effort. The new Green Line Station will be the huge push that will set it in motion.

I-095-001

So why, on the cusp of a new vital era, would you needlessly put a maintenance facility so near where the growth potential lies? It makes much more sense to cluster the new facility near where the existing facilities are located.

As far as I can tell, the only justification for locating at Yard 8 is to make it easier for trains to pull in and out without having to back up. I am sure that there are engineers and planners salivating over this, and they will fight to the end to get it. But please scrutinize their arguments carefully. Is this advantage really worth al the mitigation and resistance that will be mounted against Yard 8? How much time do you really save if an off-line train can just pull in? Why is it so important to have this when backing up is standard practice in all the other facilities?

I am asking you to locate elsewhere for the benefit of Somerville. It just makes sense.

Please don't choke us, just when we are getting a real chance to breathe life in to this area.

Best Regards,

Tom Devlin
Brickbottom Building

I-095-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-096-001

EEA# 13886

Secretary Ian Bowles
To: Who ever may Concern

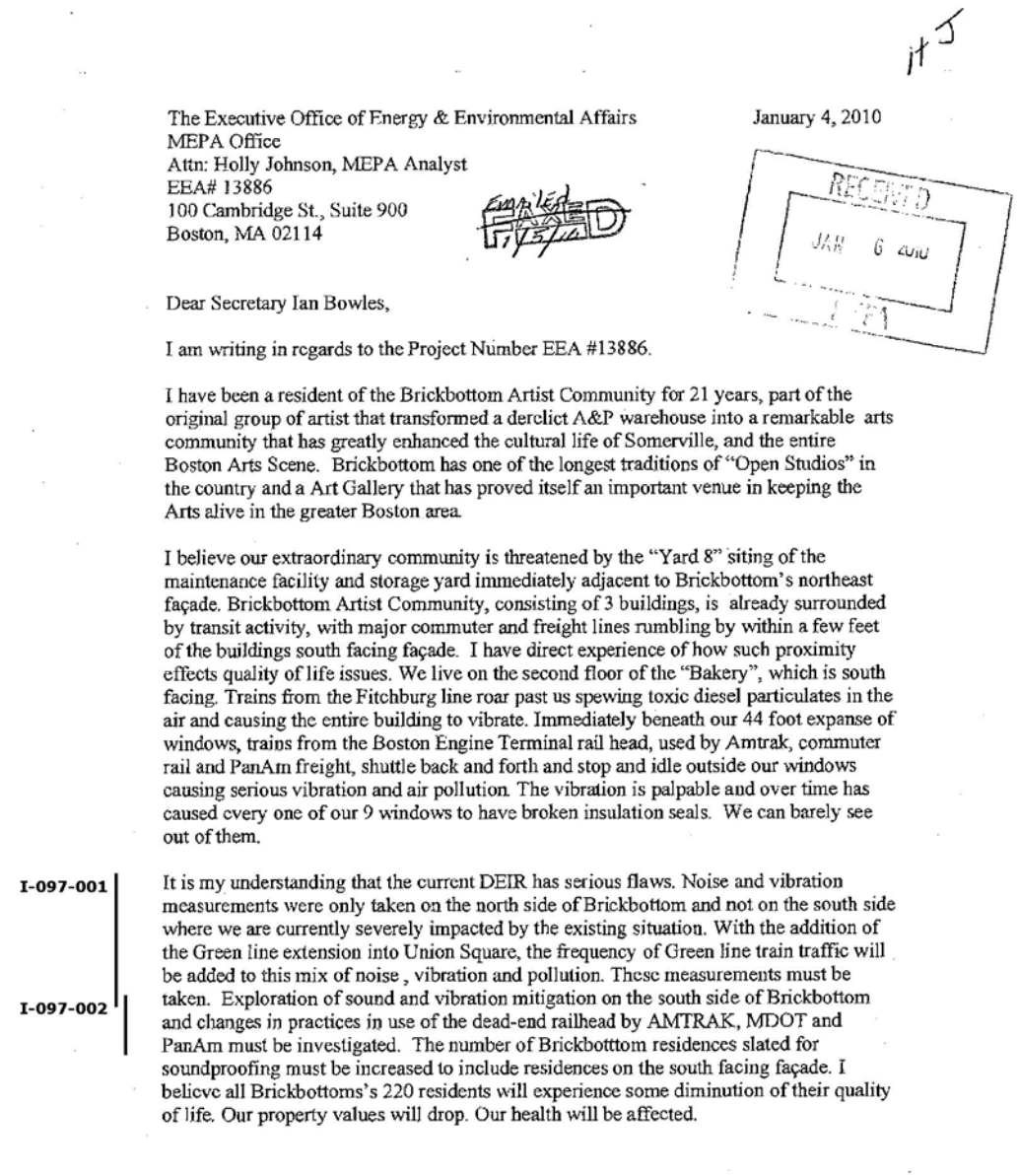
THank you For the new green line. Hopefully the new green line will be closer to my house which is the mystic than Sullivan Station.

your truly
Chris Dewing, 19

Somerville, MA 02145
25 river rd #25

I-096-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.



The Executive Office of Energy & Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge St., Suite 900
Boston, MA 02114

January 4, 2010

RECEIVED
JAN 6 2010

Dear Secretary Ian Bowles,

I am writing in regards to the Project Number EEA #13886.

I have been a resident of the Brickbottom Artist Community for 21 years, part of the original group of artist that transformed a derelict A&P warehouse into a remarkable arts community that has greatly enhanced the cultural life of Somerville, and the entire Boston Arts Scene. Brickbottom has one of the longest traditions of "Open Studios" in the country and a Art Gallery that has proved itself an important venue in keeping the Arts alive in the greater Boston area.

I believe our extraordinary community is threatened by the "Yard 8" siting of the maintenance facility and storage yard immediately adjacent to Brickbottom's northeast façade. Brickbottom Artist Community, consisting of 3 buildings, is already surrounded by transit activity, with major commuter and freight lines rumbling by within a few feet of the buildings south facing façade. I have direct experience of how such proximity effects quality of life issues. We live on the second floor of the "Bakery", which is south facing. Trains from the Fitchburg line roar past us spewing toxic diesel particulates in the air and causing the entire building to vibrate. Immediately beneath our 44 foot expanse of windows, trains from the Boston Engine Terminal rail head, used by Amtrak, commuter rail and PanAm freight, shuttle back and forth and stop and idle outside our windows causing serious vibration and air pollution. The vibration is palpable and over time has caused every one of our 9 windows to have broken insulation seals. We can barely see out of them.

I-097-001 It is my understanding that the current DEIR has serious flaws. Noise and vibration measurements were only taken on the north side of Brickbottom and not on the south side where we are currently severely impacted by the existing situation. With the addition of the Green line extension into Union Square, the frequency of Green line train traffic will be added to this mix of noise , vibration and pollution. These measurements must be

I-097-002 taken. Exploration of sound and vibration mitigation on the south side of Brickbottom and changes in practices in use of the dead-end railhead by AMTRAK, MDOT and PanAm must be investigated. The number of Brickbotttom residences slated for soundproofing must be increased to include residences on the south facing façade. I believe all Brickbottoms's 220 residents will experience some diminution of their quality of life. Our property values will drop. Our health will be affected.

I-097-001

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-097-002

Please see response to Comment I-097-001.

I-097-003

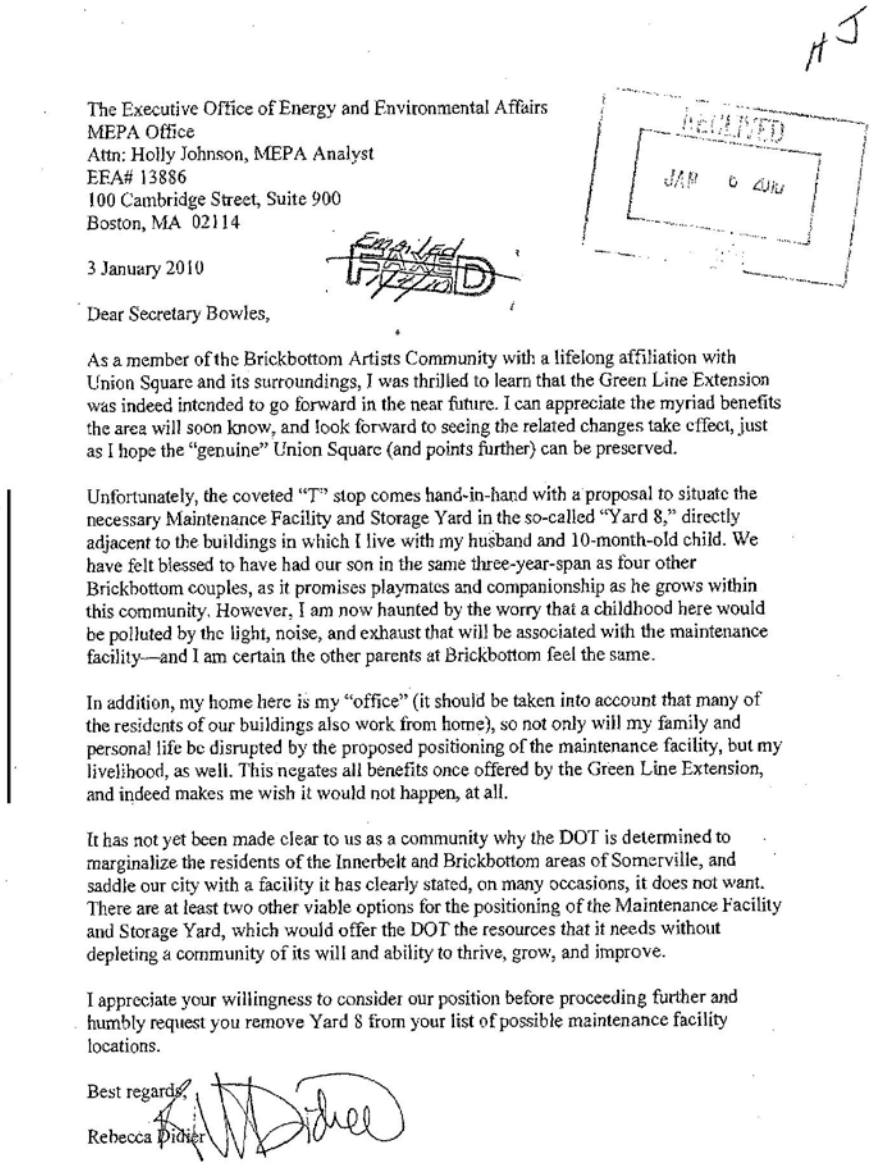
The "Yard 8" site will negatively impact commercial and residential development in the City of Somerville as it seeks to increase its commercial and residential tax base. Location of the maintenance and storage facility to Option L or Mirror H will help reduce some of the impact of locating all these facilities in the city of Somerville and certainly demonstrate respect and consideration to the residence of Brickbottom who pioneered development in this area of the city.

Sincerely,

Damien DiBona
1 Fitchburg St. B-255
Somerville, MA
02143

I-097-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 6 2010

3 January 2010

Dear Secretary Bowles,

As a member of the Brickbottom Artists Community with a lifelong affiliation with Union Square and its surroundings, I was thrilled to learn that the Green Line Extension was indeed intended to go forward in the near future. I can appreciate the myriad benefits the area will soon know, and look forward to seeing the related changes take effect, just as I hope the "genuine" Union Square (and points further) can be preserved.

I-098-001

Unfortunately, the coveted "T" stop comes hand-in-hand with a proposal to situate the necessary Maintenance Facility and Storage Yard in the so-called "Yard 8," directly adjacent to the buildings in which I live with my husband and 10-month-old child. We have felt blessed to have had our son in the same three-year-span as four other Brickbottom couples, as it promises playmates and companionship as he grows within this community. However, I am now haunted by the worry that a childhood here would be polluted by the light, noise, and exhaust that will be associated with the maintenance facility—and I am certain the other parents at Brickbottom feel the same.

In addition, my home here is my "office" (it should be taken into account that many of the residents of our buildings also work from home), so not only will my family and personal life be disrupted by the proposed positioning of the maintenance facility, but my livelihood, as well. This negates all benefits once offered by the Green Line Extension, and indeed makes me wish it would not happen, at all.

It has not yet been made clear to us as a community why the DOT is determined to marginalize the residents of the Innerbelt and Brickbottom areas of Somerville, and saddle our city with a facility it has clearly stated, on many occasions, it does not want. There are at least two other viable options for the positioning of the Maintenance Facility and Storage Yard, which would offer the DOT the resources that it needs without depleting a community of its will and ability to thrive, grow, and improve.

I appreciate your willingness to consider our position before proceeding further and humbly request you remove Yard 8 from your list of possible maintenance facility locations.

Best regards,

Rebecca Didier

I-098-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Tai Dinnan [tai.dinnan@gmail.com]
Sent: Friday, January 08, 2010 4:26 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Draft EIR (EEA #13886)
Attachments: DEIRComment2010.doc

January 8, 2010

To: Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
EEA #13886
Attn: Holly Johnson
MEPA Analyst
100 Cambridge Street, Suite 900 Boston, MA 02114
Fax: 617-626-1181

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Ian Bowles:

I am a resident of Somerville and use my bike and public transportation to travel around the city and into Boston. My work and much of my thinking is directed toward sustainable community development and community health. I am writing today to recommend that the Draft EIR be approved, with a few modifications.

I eagerly anticipate the extension's completion by December 31, 2014 and therefore hope design and construction proceed in a thoughtful manner with a few important changes. Some issues that I think are especially important include incorporation a meaningful public input process in all planning and construction phases, opposition to the Maintenance Facility site at Yard 8, the full integration of the Community Path into the extension process, a route 16 terminus, synchronization of bus routes with the new T corridor, investment in sufficient bike racks at all stations, and integration of green building techniques in newly constructed buildings and stations along the route.

I-099-001

I believe that community involvement is the only way to ensure a successful Green Line extension project. A project-wide Citizens Advisory Group should be maintained throughout the entire project, including detailed design, engineering, construction and start-up phases. Smaller local advisory groups should be established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues.
Additionally, MEPA should require collaborative planning, with meaningful community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work out of a centrally located field office to maximize access. Community Corridor Planning is willing to work with state staff to assist with the creation of such advisory groups.

I-099-002

I am in strong opposition to the Maintenance Facility site at Yard 8.
I strongly urge you to eliminate this Option and to require Mass DOT to carry out a full analysis of the Option L alternatives and Option H for siting the Maintenance Facility. These other two options have much more support in the Somerville and Cambridge communities. Yard 8 is opposed by the cities of Somerville and Cambridge and has been vocally rebuked by community residents and business owners at numerous public meetings. It would impose an

1

I-099-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-099-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-099-002 onerous transportation infrastructure burden on the city that would negatively impact quality of life and preclude economic development of Brick Bottom/Inner Belt. Placing such a structure in Yard 8 would not only negatively impact current residents and businesses, but it would put Somerville at a significant disadvantage for future economic development in this optimal area.

I-099-003 As a year-round bicycle commuter, I eagerly await the extension of the community path. The Community Path must be fully integrated into the design, planning, and construction of the Green Line extension. The Path exemplifies the Federal Transit Administration's new policy on bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The DEIR should state specifically that the extension of the path will be designed by MassDOT as agreed to in February of 2009. It is essential that the Community Path and the Green Line extensions be built as one project.

I-099-004 The Mystic Valley Parkway / Route 16 terminus should be designed and constructed at the same time as the rest of the project.

I-099-005 I-099-006 Green Line station designs should effectively accommodate bus drop off and pick-up with much attention given to the ease of intermodal connections. Bus routes in Somerville must be aligned to optimize connections to Green Line stations simultaneous to the start of Green Line service. Community input must be gathered regarding the re-routing of bus lines and bus stops before this can happen.

I-099-007 The number of bike racks currently proposed does not meet the needs of the community. The number of riders in and around Somerville, and the increase in riders due to closer proximity to the new T stops

I-099-008 Lastly, it is imperative that the DEIR state clearly how the Maintenance Facility, Storage areas and stations will be sustainable structures. It is our belief that the environmental impact of extending the Green Line should also encompass the use of "green" technology that can be included in the construction of the new structures. This should include creating green roofs on all storage facilities, and utilizing renewable energy technology to power the buildings. Such technology, especially green roofs, will add insulation, sound proofing, mitigate stormwater issues and decrease the urban heat island effect, not to mention add to the asthetics of the area. One final note on creating green structures, the act of jumping on the "green revolution" bandwagon will also allow for a certain degree of bragging rights by the state and the MBTA. Let us be leaders for the Commonwealth, and maybe even the country in this regard.

Thank you for taking the time for considering my opinions. Sincerely,

Tai Dinnan
Somerville Resident

2

I-099-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-099-004

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-099-005

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-099-006

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-099-007

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-099-008

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual designs. Detailed designs for each station, the maintenance facility, and the entire Project will be refined during the preliminary

engineering phase. As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR.

AJ

January 1, 2010



Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attention Holly Johnson MEPA Analyst
EEA # 13886
100 Cambridge Street Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I would like to submit my comments regarding the Draft Environmental Impact Report/Environmental Assessment; I am a direct abutter to the railway in Medford and one of the Medford Advisory Group Members.

I would like to start out saying that I am not opposed to this project and that I believe in public transportation as well as improving the air quality for the region and Medford. I am the mother of three sons ages 23, 21, and 19, none of my sons has a car and utilize the public transportation system. My 23 year old has attended Salem State commuting by subway and commuter rail and works in the State Street area of Boston commuting via the Red Line, the 21 year old attended Ben Franklin Institute in Boston commuting by the Orange line, and had taken the Downeaster to visit friends at UNH and the 19 year old currently attends Middlesex Community College in Lowell commuting via commuter rail, they have also attended many sporting events and entertainment venues in Boston via subway. As you can see my family is very well versed in the public transportation options in our area and utilizes many of the options available to us.

I-100-001

I-100-002

I understand the legal commitment to under take such a project as this and believe that light rail access to Medford and Tufts University is a good thing. At the same time I am concerned that the my neighborhood and community will be greatly impacted with little benefit. The December 1, 2006, Certificate of the Secretary of Environmental Affairs letter on the Expanded Environmental Notification Form states: "The project should be designed to maximize benefits for local residents while preserving the integrity and character of existing neighborhoods." I do not believe that we have sufficient information or the correct information in this report to accept it as the final version. At a recent City Council meeting I attended DOT/EOT admitted that the information was only 10% complete and that more work needs to be done. I also believe that the numbers regarding air quality, noise and vibration and impact to the neighborhood are now incorrect as the commuter rail tracks have been reconstructed (raised) due to flooding and now the top of the trains are above ground exposing the neighborhoods to a higher level of diesel particulate matter, noise and vibration.

As I attended the advisory group and public out reach meetings I asked several times what impact the on air quality would this project have on the abutters and I was told none that the Green Line trains were very clean. When I asked why the foliage along the current rail line was dying I was told that this was a natural progression. I did not know that trees in a healthy environment had a

I-100-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-100-002

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency. Additionally, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors.

life span of only 10 years. When I challenged this answer by saying that moving the commuter rail closer to the neighbors would have no impact, I was then told that yes there was some impact and that maybe we could get filters installed on the trains. Imagine my surprise that the trains did not already have these filters installed, I spoke to Mayor Mc Glynn and I believe that the trains now have the filters installed but for how long as the DOT/EOT has repeatedly stated the commuter rail does not fall under their control. These reports also state that the commuter rail trains will be 50 feet from the neighboring houses I believe that this is an incorrect statement. Although I do not have the sophisticated equipment the state has my little tape measure has the commuter rail tracks at forty feet from my property currently and moving them 13 to 18 feet toward my property will put them inside the 50 feet in the studies.

I-100-003

I would like to call to your attention a report "The Massachusetts 2002 Diesel Particulate Matter Inventory" issued by Massachusetts Department of Environmental Protection, September 2007, page 1, paragraph 1.2 Health Effects of Diesel $PM_{2.5}$ states:

"Exposure to PM has been causally linked with increased mortality from cardiopulmonary diseases and lung cancer. Studies show that heart attacks may be linked with very brief exposures of less than 24 hours. Other health effects include lung damage, respiratory distress, and exacerbation of bronchitis and existing allergies. Population groups that are especially susceptible to the health effects associated with PM exposure include the elderly, children and people with existing heart disease, lung disease and diabetes."

"In Massachusetts, $PM_{2.5}$ is also a serious public health concern because it is thought to be associated with the state's high rate of asthma.[3] The Asthma Regional Council, in the most comprehensive examination of asthma in New England to date, recently found that one in ten children in Massachusetts has asthma.[4] Children are more vulnerable to air pollution than healthy adults because their respiratory systems are still developing and they have a faster breathing rate. Other factors that may also increase vulnerability to pollution-related effects include reduced access to health care and specific exposure pathways, such as the proximity of residences to PM sources (e.g., roadways and construction sites)."

I-100-004

Now I must share additional personal information that I would prefer to keep private but in the best interest of my neighbors and my family I am compelled to include. I am a breast cancer survivor who has had a mastectomy, after I had surgery I had a very difficult time healing, my doctors repeatedly asked me if I smoked to which I replied that I have never smoked. They could not explain why I was not healing and told it was very puzzling as my overall health appeared good. Recently I was diagnosed with asthma, after repeatedly going to my doctor with complaints of not being able to breathe and now have two inhalers (Advair and Albuterol); while I am not saying that the commuter rail is the cause of my health woes I do wonder if they have exacerbated my conditions. Again I have no proof that this is the case but after reading the above mentioned report it does make me wonder.

As to the claim of improvements in the regional air quality - This may improve at the expense of my community as people from other communities drive through Medford to access the Green Line instead of taking transit options already available to them.

I-100-003

The effects of moving the diesel commuter rail trains closer to homes was evaluated in the DEIR/EA. As stated in that document, in the vicinity of Charnwood Road, the commuter tracks are not expected to be within 50 feet of houses, although they would be less than 50 feet from the property line as the commentor observes.

I-100-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-100-005 I believe that tunneling options should be explored to a greater extent and believe that it is very short sighted to be looking at Mystic Valley Parkway/Rte 16 as the terminus, with the tunneling option eventually the terminus could be Arlington Center, Lexington Center or even the Anderson Station in Woburn were there is plenty of parking and room for a maintenance facility North of Boston. A terminus at the Woburn location would ease traffic on Rte 93 thus improving the air quality for the overall region without impacting the community and the health and well being of my neighborhood. We had several people from the Tunnel Workers Union come to speak about the innovations that have been made over the years and how if it is done right the neighborhoods would not even know they were there. I am disappointed that the report has come up with cost tunneling but did not provide a cost breakdown. I would have like to see what the actual cost of recent and ongoing projects such as the Deer Island Tunnel and the tunneling project in South Boston that the tunnel workers mentioned at several meetings included in the DEIR.

I-100-006

I-100-007 I also want to reinforce the City of Medford's assertion that this report does not sufficiently identify the impacts on property and businesses in our city. Our City is largely residential with pockets of commercial areas, many of the businesses are small family owned that have been around for a long time. There may not be other locations in our community to accommodate date them. During re-construction of bridges traffic will be re-routed making it difficult to access these businesses and once completed the Hillside business area will lose several parking spaces.

I-100-008 It was very disheartening to hear at the same City Council meeting that when questioned about the number of jobs and tax dollars lost DOT admitted that there were some mistakes in the report. How are we to trust the rest of the information is accurate or did we just not ask the right questions to get the true impact of this project as in my question above concerning the air quality impacts of the project to abutter it was only when I specifically asked about the effects of moving the commuter rail closer to the abutters that DOT conceded there would be an impact.

This is the first time I have participated in a process such as this, I do not understand how MEPA can sign off on a project that is only 10% completed and brings a known carcinogen as sited in your own report listed above closer to the population.

Best Regards,

Rita Donnelly

Rita Donnelly
35 Charnwood Road
Medford, MA 02155
Tel. 781-391-4601
Email: radonnelly28@aol.com (home)
rdonnell@lytron.com (work)

I-100-005

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

I-100-006

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-100-007

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

I-100-008

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

Johnson, Holly (EEA)

From: Frances Donovan [okelle@gmail.com]
Sent: Monday, November 16, 2009 8:05 AM
To: Johnson, Holly S (ENV)
Cc: Fichter, Katherine (DOT); reisnere51@gmail.com
Subject: Green line extension in Somerville

Dear Ms. Johnson:

I wanted to write to you to express my support for the Green Line extensions through Somerville. I understand that there is some question regarding funding. As you know, Somerville is a very densely populated city that is also in the midst of a major commuter path into the city. Extension of public transportation has a number of long-term benefits. Not only does it serve to ease traffic congestion, it also encourages the reduction of greenhouse gas emissions, thus contributing to the amelioration of global warming and reducing American dependence on foreign oil. Further, it can foster a sense of community among residents of the Boston metro area.

As a former resident of Cambridge and a current resident of Arlington, I am a big fan of any improvements to the public transportation system that will enable me to leave my car at home, or to spend more time driving and less time idling in backed up traffic.

A recent STEP mailing has also alerted me to some issues with the current implementation plan. Please remember to listen to the residents of the neighborhoods where these improvements are being made. They are the people most directly impacted by the construction and long-term designs of your improvements and I believe they can best speak to how these improvements can be made. It's not enough to simply extend a rail line: the Green Line needs to be well integrated with other parts of the public transportation system and bike and commuter paths. Only a well-design system will actually encourage people to leave their cars at home or give them up altogether. I-101-001

I also hope that you and the other members of the planning committee will resist the temptation to look only at short-term solutions and consider how you make this part of the T scalable for the long term. I-101-002

Thank you for your service to the citizens of the Boston metro area. I trust that you will continue to devote your energies and attention to creating a solution that best serves the public good.

Sincerely,

Frances Donovan
7 Bates Road #4
Arlington, MA 02474

I-101-001

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

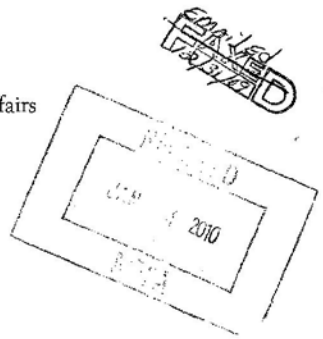
In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-101-002

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

HJ

December 31, 2009



Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St., Ste. 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing about the Draft Environmental Impact Report on project EEA #13886.

I-102-001

A maintenance and storage facility placed at Yard 8 will damage the environment of the residents of Somerville, who already absorb a disproportionate percentage of transportation infrastructure for metropolitan Boston.

Here at 1 Fitchburg Street our environment will be bombarded with yet more noise, more vibration, more artificial light, and more pollution from facility workers' cars and maintenance vehicles.

Option L and Mirror H at least would not be placed directly next to a vibrant community of 200 people, including a number of families with young children, my own family included.

The residents of Somerville must be listened to, in our unanimous opposition to the placement of this facility at Yard 8.

I-102-002

Regarding the environmental impact of the Green Line extension, a tunnel taking the trains underground, out of sight and decreasing the noise and vibration impacts on residents, should be seriously considered. Somerville is a dense urban area which, like most other areas of it same density, needs more, and more convenient, public transportation. However, Somerville deserves not more trains seen, heard, and felt by residents 20 hours a day, but landscaped open spaces like those created above the Big

I-102-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-102-002

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

I-102-002 Dig in Boston; spaces that can improve our physical environment instead of decreasing our quality of life.

I-102-003 1) Prior to any construction , mitigation should be planned and constructed for the light, noise, air, and vibration pollution that will ensue.

I-102-004 2) The Community Bike Path must be fully planned and should be completed
I-102-005 along with plans for the Green Line Extension. Access from Brickbottom Studios should be planned & constructed, as another alternative to mass transportation. There are many daily bicycle riders at Brickbottom, who would use this access.

I-102-006 3) There is a vague reference to a land taking at the South end of Brickbottom. As this "need" is vague and unsubstantiated, it's hard to know what it refers to. Any plans for any land takings must be fully described and the reasons given.

I-102-007 4) Community involvement is key to the success of this project. The DEIR does not include a CAC to be established. This should be a given. MassDOT has systematically avoided this issue. An example is the community opposition to Yard 8, which has been unanimous since the beginning of the project. Yet MassDOT has included Yard 8 option in the DEIR. It is another example of stonewalling on this important issue, and a source of mistrust by the community in MassDOT's ultimate intentions.

I-102-008 5) Be clear on this: Yard 8 is unacceptable. Decouple the timeline for completion of the Green Line Extension from the building of the Maintenance Facility wherever it is sited.

I appreciate your continued serious consideration of alternatives to Yard 8 and to building a transportation infrastructure that will not only help thousands of people each year, but hundreds of Somerville residents every day.
The use of existing rail lines for this Extension is understandable, yet it must be done in a way that will improve the quality of life, not damage that quality of life. Forward looking design, using the latest technology is needed, not the easiest solution without regard to the Communities through which this project runs. There are precedents. Japan and Sweden have built quiet forward looking rail design. Why can't MassDOT do the same?
Sincerely,

David H. Douglas
1 Fitchburg St. B454
Somerville, MA 02143
vidlsm@mindspring.com

I-102-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-102-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-102-005

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the

Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-102-006

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-102-007

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-102-008

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Dunn, Dennis A [dadunn@bu.edu]
Sent: Tuesday, January 05, 2010 12:29 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension

January 5, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-103-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice.

However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.
The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**
There are many, many problems with the Phase II approach, including:
• **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
• **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed

1

I-103-001

Please see Comment Letter I-002.

and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Dennis A. Dunn

Dennis A. Dunn
56 Holbrook Road
Weymouth, MA 02191

Formerly of:
23 Canal St.
Medford, MA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED January 8, 2010
JAN 8 2010
MEPA

"One thing I want to be very clear about: I have recommended to the Governor ... I'm putting a report together for him that I'll send him as I'm leaving office ... I'm very clear, that the Green Line extension really doesn't make any sense unless it goes to Route 16. I think it has to go to Route 16 and we've got to find a way to make it go to Route 16."
outgoing Secretary of Transportation James Aloisi, October 29, 2009.
http://blip.tv/play/AYGq91kC (seventeen-second comment at 9:58 - 10:15)

Dear Secretary Bowles:

The Draft EIR that MassDOT has submitted is not satisfactory. It fails to meet the minimum requirements for the Draft EIR and surely cannot preclude the need for a Final EIR. Notwithstanding being nearly a year overdue, the Draft EIR has glaring holes in it and MassDOT must be required to complete this critical planning document, either with a Final EIR or by supplementing or amending the Draft EIR prior to approval as an EIR.

Inadequacies in the DEIR abound and I trust others will collectively cover most, if not all of them. My objections are in three areas:

I-104-001

1) **The Green Line Extension described in the DEIR does not meet its legal obligation to provide service to Medford Hillside by the end of 2014.** One can label a station at College Avenue "Medford Hillside", but it *still is not* Medford Hillside. One can claim that the catchment area for a station stop is a radius of a mile or some other arbitrary size, but too many people farther away than about a third of a mile are going to drive, rather than walk, and once they get into their cars, they will probably drive to their destination rather than to the station. One can insist that the final Route 16 leg, which does, indeed, serve Medford Hillside, will be constructed at some later date, but unless that later date is prior to the end of 2014, the obligation to serve Medford Hillside by 2014 has not been met. In the pages that follow, you will find a graphical demonstration of what does and does not constitute Medford Hillside.

I-104-002

2) **The DEIR, in its current form, fails to meet the requirements of the 2006 EENF Certificate in that it does not demonstrate satisfactory analysis of the Route 16 Terminus Alternative as the Certificate mandates.** Scant effort seems to have been made to develop a viable option for a terminus at Route 16. Inadequate assessment has been made of the negative consequences of postponing the Route 16 Terminus until a decade later or, more likely, neglecting to ever to build it. The DEIR includes land takings of substantial commercial properties resulting in inflated build costs and diminished tax revenue despite the existence of practical alternatives that avoid the takings. These takings demonstrate superficial, if any, effort to advance a workable design for a Route 16 terminus. The DEIR reports the tax losses caused by the takings but fails to report the offsetting tax revenue *increases* the city would enjoy from elevated values for properties that are *not* taken. Later in this document is a drawing of an alternative track alignment – one which eliminates the need

I-104-003

I-104-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-104-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can

I-104-003

to take two of the three commercial properties that are threatened by a Route 16 terminus. This track alignment was developed by a citizens' group working independently of EOT / MassDOT but with design guidelines provided by EOT. Had adequate analysis of a Route 16 terminus been done as required by the EENF, MassDOT would have discovered a similar track configuration and included it in the DEIR instead of the one they did include.

I-104-004

MassDOT has described the design for the Route 16 terminus as "worst case" and stated that they have been exploring a design that is similar to the alternative that avoids the commercial takings. This effort must be taken to its conclusion and included in the EIR.

I-104-005

3) **In its preparation for the DEIR submission, EOT neglected to adequately consider the concerns of the affected communities.** EOT did expend substantial time and effort in community outreach and met with many citizens' groups. However, there is precious little evidence that they acted on input from the public except in cases where the opinions they heard supported a conclusion that they had already arrived at. They left unanswered the questions in a June 11, 2008 letter from a four-member Massachusetts Legislative Delegation representing the areas surrounding the Route 16 station (Sen. Jehlen, Rep. Sciortino, Rep. Garballey, Rep. Donato). Meanwhile, EOT squandered precious time and resources exploring an outlandish tunneling proposal that was clearly and obviously outside the scope of the project. They claimed local opposition in order to discontinue consideration of a Winthrop Street station. The opposition to a Winthrop Street station was muted at its loudest. They silently ignored nearly fifty pages of research on the extent of Medford Hillside neither offering rebutting evidence nor raising questions of relevance. This research was submitted in conjunction with a public comment to the 2008 SIP and their response was essentially, "Well, that's your opinion." More recently, in the summer of 2009, they were unable to find time to meet with a citizens' group that was attempting to identify more fiscally-conservative design options for Route 16. The citizens' group subsequently independently developed an alternative alignment using information previously provided by EOT and following accepted design principles.

Please see the supporting materials and related attachments on the following pages concerning these three inadequacies in the DEIR.

I-104-006

Nearly a year ago I was pleasantly surprised to learn that EOT had concluded that Route 16 was the preferred terminus for the Green Line Extension. I was relieved that courage, wisdom and foresight had prevailed over parochialism, fear mongering and ennui. MassDOT needs the opportunity to repeat EOT's success of a year ago. Please do not accept the DEIR as it is currently written, in particular, with a terminus (even a temporary one) at College Avenue, as the Final EIR.

Regards,



John Roland Elliott
34 Emery Street
Medford, MA 02155-5307

be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-104-003

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-104-004

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Supporting material regarding inadequacies in the DEIR

1) College Avenue at Boston Avenue is not Medford Hillside.

EOT and later MassDOT has repeatedly asserted that "Medford Hillside" is an inconsistently-defined term and that opinions differ as to what is and is not included in "the Hillside". They have insisted that not only does a station at College Avenue and Boston Avenue *serve* the Hillside but that such a location *is* the Hillside. That claims is in contradiction to more than a century of history.

The attached document, *In Search of Medford Hillside 1891-2008*, locates Medford Hillside well north of College Avenue and closer to Mystic Valley Parkway / Route 16. Here is the table of contents for the document:

Pages	*Section*	*Abstract*
2-5	*Historical Maps from the Medford Public Library Map Collection.*	Places named Hillside are consistently at Winthrop Street or north of it.
6-7	*Modern Maps from the Medford Public Library Map Collection.*	One map showing Medford Hillside north of North Street; one showing Medford Hillside between College Avenue and Winthrop Street northeast of Boston Avenue.
8-11	*Historical Excerpts from the Medford Public Library General Reference Holdings.*	A definition of Medford Hillside as the northwesterly slope of College Hill. Mention of Winthrop Street and North Street as the two "rangeways" through the Hillside territory. Mention of Capen Street, Quincy Street, 286 Boston Avenue (all north of Winthrop) and Harold Street and Pinkham Road (both north of North Street) as Medford Hillside.
12-16	*Germane Content from Various Government Agencies.*	Excerpts and maps from the EOT's Beyond Lechmere Study; data and maps from US Geological Survey (USGS) Geographical Names Information System (GNIS); a map from EPA; all showing Medford Hillside situated north of Winthrop Street and closer to North Street than to Winthrop.
17-19	*Contemporary Photographs of locations with "Hillside" in their names.*	Seven photos of landmarks and businesses, all at, or north of Winthrop Street.
20-34	*Modern Maps from Internet Mapping Web Sites.*	Ten maps, all supporting placement of Medford Hillside north of Winthrop Street. A map showing the locations of 127 Hillside businesses, churches and organizations clustering north of Winthrop Street. A table of those businesses with distances from each to a possible station at Mystic Valley Parkway, Winthrop Street and College Avenue. Average distance to College Avenue is roughly twice either Winthrop Street or Mystic Valley Parkway.
35-44	*Newspaper References (Articles, Obituaries, Real Estate Transactions, Classified Ads) Locating Medford Hillside.*	37 excerpts from newspapers from 1889 to 2006 mentioning neighborhood streets and overwhelmingly placing Winthrop Street as the de facto southern boundary of Medford Hillside.

I-104-005

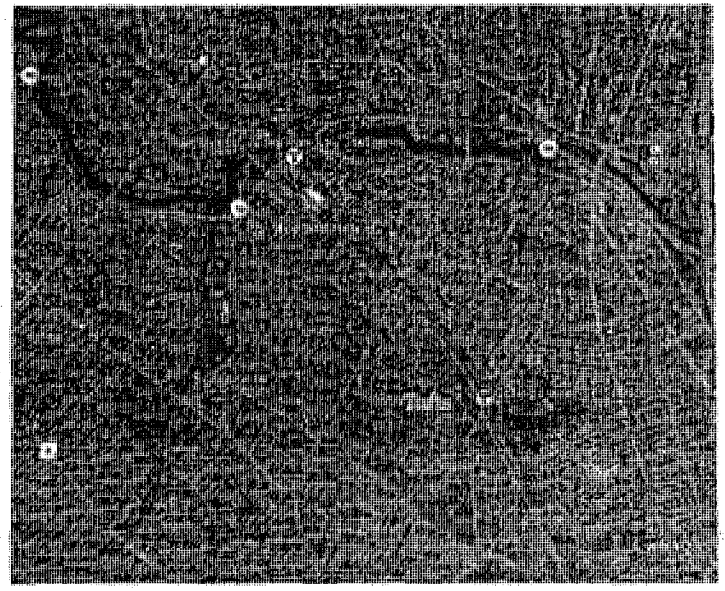
In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-104-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

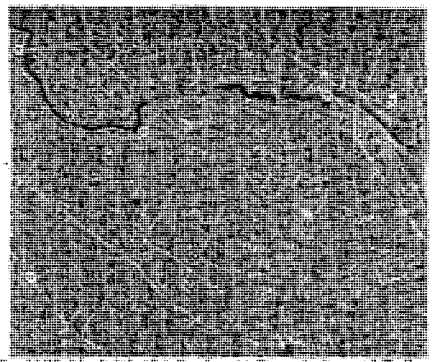
Supporting material regarding inadequacies in the DEIR

Consolidation of information from the sources in that document results in the following:

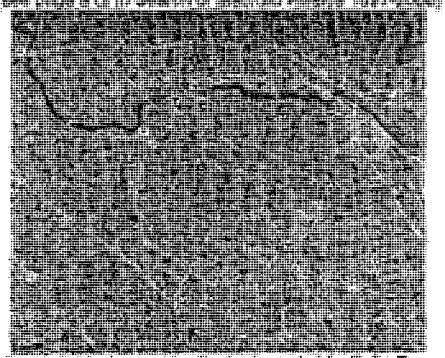


- Locations of businesses that self-identify as serving Medford Hillside (see pages 22-27 in *In Search of Medford Hillside 1891-2008*)
- Locations of addresses mentioned in conjunction with Medford Hillside in historical references and newspaper clippings (see pages 10-11 and 35-44 in *In Search of Medford Hillside 1891-2008*)
- Approximate location of Medford Hillside according to a majority of Internet mapping resources (see pages 15-16, 20, 27-32, 34 in *In Search of Medford Hillside 1891-2008*)
- Location of Medford Hillside Station c. 1900 (see pages 2-3, 5 in *In Search of Medford Hillside 1891-2008*)

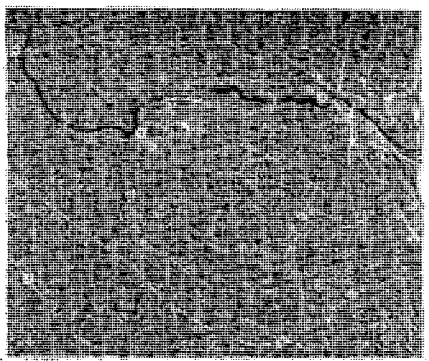
MassDOT correctly observes that opinions differ on the precise boundaries of the Medford Hillside. However, as shown in the following four drawings, sources that put boundaries on the Hillside consistently *exclude* the site where MassDOT intends to locate the terminus, and which they have variously called College Avenue or Medford Hillside or a combination of the two.



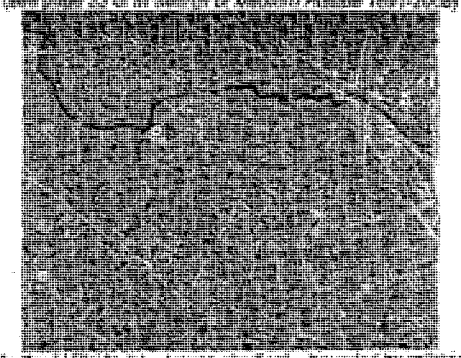
Medford Hillside (pink shading) – northwest slope of College Hill
per The Medford Historical Register Vol. XX 1917, p.5
(see page 8 of *In Search of Medford Hillside 1891-2008*)



Medford Hillside (green shading) – bounded by Tufts Campus
per Boston Herald Sep 2, 2005 page 43
TUFTS NEIGHBORHOOD MAKES GRADE
(see page 36 of *In Search of Medford Hillside 1891-2008*)



Medford Hillside (yellow shading) – bounded by Winthrop Street
per NeighborhoodScout.com
(see page 33 of *In Search of Medford Hillside 1891-2008*)



Medford Hillside (chartreuse shading) – bounded by railroad
per Dee Morris "Medford: A Brief History",
Chapter 8, "Medford Hillside"
(not included in *In Search of Medford Hillside 1891-2008*)

Supporting material regarding inadequacies in the DEIR

2) The DEIR does not represent adequate analysis of the Route 16 Terminus Alternative.

In the two years leading up to the DEIR, EOT went through several iterations of configurations for the Route 16 terminus. Unfortunately, at least from the standpoint of impact on existing revenue-generating commercial property, the designs got progressively worse over time and culminated with plans to acquire properties at 200 and 222 Boston Avenue, increasing the initial build cost, negatively affecting the employment situation for hundreds of people and reducing Medford's tax base. This intent was first revealed in June 2008 and, though perhaps not downplayed, the radical change was discovered through the scrutiny of the alert public – EOT made no announcement that these properties were at risk. The intent to take these properties survived into the DEIR despite more than a year to arrive at a design that preserved the threatened properties.

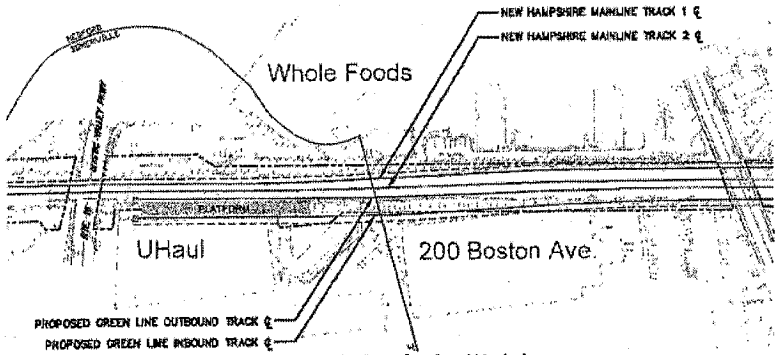
It is easy to envision a track alignment that conforms to accepted design practice but avoids radical impact on the properties previously mentioned. At the November 17, 2009 Medford City Council meeting, MassDOT / VHB personnel indicated that they have, indeed, been exploring such a configuration but that it was not complete. MassDOT has, on several occasions, described the configuration that they included in the DEIR as "worst case" from the perspective of land takings in the Route 16 area.

With an admittedly-suboptimal design in place and a better design underway but incomplete, MassDOT should be required to explore this critical piece further before they are released from the obligation to produce an FEIR.

As background to this whole discussion, consider the sequence of drawings that appears on the following pages.

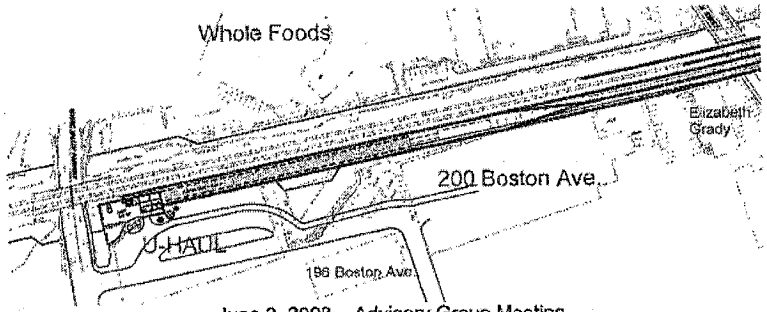
Supporting material regarding inadequacies in the DEIR

The track alignment presented at the February 6, 2008 Station Workshop conducted by EOT (http://www.greenlineextension.org/currentmaterials.asp?area=mls *Workshop Summary (2/6/08)*) shows track placement that 1) successfully avoids commercial properties at 200 and 222 Boston Avenue and 2) seems to have been chosen to preserve the bridge at North Street. It does so by moving the tracks to the north-east (the top of the drawing) and spacing them to avoid the existing bridge supports.



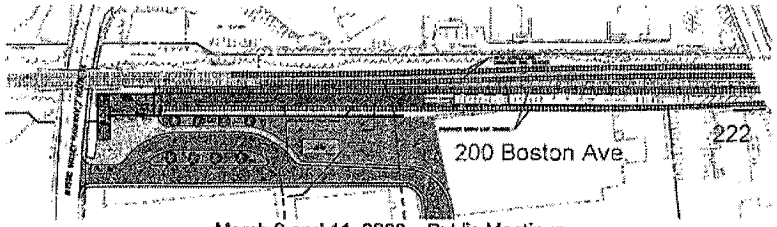
February 6, 2008 - Station Workshop

Four months later, at the Advisory Group Meeting of June 2, 2008, EOT quietly debuted a plan that ignored the existence of structures at 200 Boston Avenue and 222 Boston Avenue, Elisabeth Grady. (http://www.greenlineextension.org/currentmaterials.asp?area=mls *Mystic Valley/ Rt. 16 Station – draft.*) Unlike the previous drawing, the tracks have not been shifted to avoid existing structures and an additional (fifth) track has been introduced, effectively *increasing* the impact and requiring the reconstruction of the North Street bridge.



June 2, 2008 – Advisory Group Meeting

Nine months later, in the public meetings in Medford (March 9, 2009) and Somerville (March 11, 2009) EOT presented another version of the plan for Route 16 (*Mystic Valley Parkway / Route 16 Station* at http://www.greenlineextension.org/currentmaterials.asp?area=mls). In this drawing the shift in the Commuter Rail tracks away from the threatened properties has returned and the additional Green Line trackwork has been eliminated. However, corresponding shift in the Green Line trackwork is not included and the placement of the inbound Green Line track does not capitalize on the elimination of the fifth track. This is essentially the configuration that became Figure 3.7-27 in the DEIR. It has much of the trackwork adjustments of the original but none of the benefits in terms of commercial property and bridge preservation.

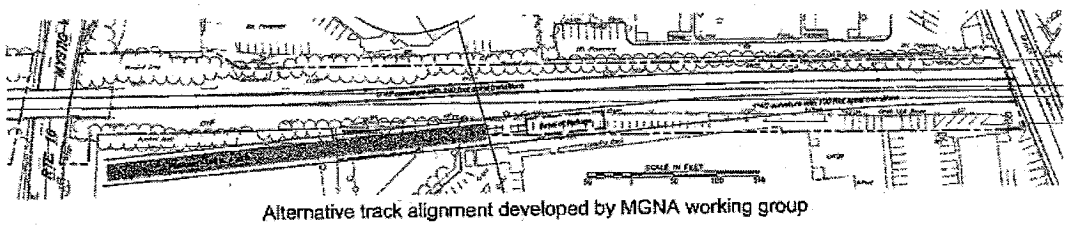


March 9 and 11, 2009 – Public Meetings

Supporting material regarding inadequacies in the DEIR

In the summer of 2009, unconvinced that EOT was devoting adequate effort to maximize the chance of a successful Route 16 terminus, a working group of interested citizens began to explore what constraints and options came to bear on the track configuration surrounding that locus. Armed with EOT-provided *Draft Schematic Design Guidelines – Green Line Extension Project*, FTA-sponsored *Track Design Handbook for Light Rail Transit* and other relevant references, the working group identified an approach to trackwork at Route 16 with the following desirable characteristics:

1. It is wholly confined within the existing railroad right-of-way except for a sliver taking from a commercial parking lot (Medford), one vacant commercial lot (Somerville) and one commercial building and lot (Somerville).
2. It uses curve radii well within the *Schematic Guidelines'* specifications, typically double the minimum and sometimes triple the minimum, thereby improving passenger comfort, reducing risk of excessive noise and decreasing the torque on rolling stock that arises in approaches to banked trackwork.
3. Where conflicting constraints appear, it uses the more stringent specification, taking a conservative approach.
4. It achieves all spiral and tangent track goals including a tangent 450-foot platform and tangent platform approach, in order to avoid wheel squeal.
5. It eliminates the need to place trackwork on the very locations where the northeast walls of 200 and 222 Boston Avenue stand today.



Alternative track alignment developed by MGNA working group

Please refer to attachments *Proposal for alternative track alignment at the Route 16 terminus station for the Green Line Extension* and *Alternative Route 16 Track Alignment* for a more thorough treatment of this alternative.

Supporting material regarding inadequacies in the DEIR

The 2006 EENF requires analysis of, among other things, the Route 16 Terminus Alternative. The analysis embodied in the DEIR is woefully inadequate. By MassDOT's own assessment, the design included in the DEIR for the Route 16 terminus is "worst case". The design is congenitally flawed in ways that virtually guarantee its rejection. Independent analysis has identified methods to eliminate the grossest defects (arising from commercial land takings) and MassDOT / VHB has admitted that it has been exploring similar configurations. MassDOT must be required to pursue the Route 16 Terminus Alternative more earnestly and to its natural conclusion – inclusion in an FEIR.

Supporting material regarding inadequacies in the DEIR

3) EOT and subsequently MassDOT have inadequately considered community / neighborhood input.

Questions from elected state officials, expressions of public opinion, reports of relevant historical research, and offers of *pro-bono* assistance have been ignored in the lead-up to the submission of the DEIR, sometimes citing resource shortages. At other times, expansive investigation and reporting by EOT has been prompted in response to demands that were well beyond the scope of the project as defined in the EENF. EOT has, on occasion, used undocumented claims of public opposition to justify a course of action.

Failure by EOT to respond to questions from elected officials representing affected communities:

June 11, 2008

Secretary Bernard Cohen
Executive Office of Transportation
10 Park Plaza, Suite 3170
Boston, MA 02116

Dear Secretary Cohen:

Over the past several months, there have been numerous Neighborhood Station Planning Meetings, Project Advisory Group meetings, and general information meetings about the Green Line Extension (GLE) through Somerville and Medford. As a delegation, we have stood unified in support of improving public transportation in our communities, with a commitment to respecting the integrity of existing neighborhoods, and to the utmost inclusion of local residents and officials.

Many of the recommendations and suggestions made by the neighborhoods have been taken into account, which we appreciate. And having been involved in the public process, and hearing from numerous constituents, it appears we have made progress in getting closer to a consensus within our community about where stations should be sited, and what concerns and mitigations should be taken into account and planned for.

Nevertheless, the question of where the terminus is to be located remains unanswered. We advocated for studying the potential of Rt. 16 as a terminus. This study was included in the Secretary's Certificate for the Environmental Impact Review. The Certificate also called for looking at stops at College Ave, Winthrop Street, or a combined station between College and Winthrop.

In order to make a complete and informed decision as a delegation about our own recommendations of a terminus location, we would like to request a comparative evaluation of 1) a single track alternative for the stretch leading up to Route 16, 2) the two track version that was included at prior meetings, 3) the three track version as recently presented, and 4) tunneling in the final stretch of the extension, an option that has often been asked about. Specifically, we would like to see a comparison of the four variations in the following areas:

- Impacts on the North Street and Winthrop Street bridges
- Specifics of any possible takings or impacts on both residential and commercial properties, including information about where such impacts are the result of encroachment onto the MBTA's right of way versus the extension encroaching on private property
- The estimated cost differences
- The operations benefits or drawbacks

This information may provide insight as to whether Winthrop Street or College Ave would be the next stop. As such, we would also like an update on ridership estimates, including a comparison of what the ridership would be at all three locations, and how that changes if any of these stops were not to be included in the final recommendation.

Supporting material regarding inadequacies in the DEIR

As we have made clear from the beginning, we are looking to see this project bring the most benefit to our community, and have the fewest negative impacts. We believe a thorough explanation of the above matters will be helpful in our being able to support any final plans drawn up by your office.

We would appreciate a response as soon as possible, considering the application for New Starts funding is expected to occur some time in early fall. We appreciate all of the work that is going into this project, and look forward to continuing to build on the community to let me know whether these recommendations will be adopted.

Sincerely,

Patricia D. Jehlen, State Senator; Carl Sciortino, State Representative; Sean Garballey, State Representative; Paul Donato, State Representative

cc: Mayor Michael McGlynn
Mayor Joseph A. Curtatone
Steve Woelfel, Project Manager, EOT
Kristine Wickham Zimmerman, Vanasse Hangen Brustlin, Inc.

As of February 4, 2009, from one of the signatories:

> I just wanted to clarify one thing, which is that we never did get a formal response from our letter last summer about 1, 2, or 3-track options. The answer I got back, verbally, was 'it will be in the DEIR when we get to that stage.'

EOT did, however, in November 2008 release a 35-page Technical Memorandum representing a substantial effort to evaluate a tunneling option that was obviously outside the scope of the EENF in that it did not follow the existing Lowell Line right-of-way.

EOT's disregard for public opinion:
Surprised by the plan revealed at the June 2, 2008 Advisory Group meeting that demonstrated intent to take (or at least require some radical structural changes to) 200 Boston Avenue, and after confirming our interpretation of the plan at the August 4, 2008 Advisory Group meeting, MGNA requested a meeting with EOT to understand the then-current plan for Route 16. EOT granted us that meeting and it transpired on August 18, 2008.

In the meeting, our fears of commercial property takings were confirmed. EOT repeated some outright misrepresentations, advanced some outlandish propositions, evaded some obvious questions, denied some previously-made statements but presented no evidence that an earnest effort was being made to design a practical viable terminus at Route 16.

In preparation for the meeting I made the following notes to help me steer the meeting, if I could.

The subjects I want them to address are:
1) What are they up to at Mystic Valley?
   a. If their plans involve taking 200 and 222 Boston Avenue, what design elements dictate that?
   b. Does the plan involve multi-level parking? How many vehicle spaces?
   c. What other possibilities did they reject that wouldn't have required

taking 200 and 222?
   d. What other properties are jeopardized? On Piggott Street? On Orchard Street?
2) If (when) their MVP plan is nixed, how will they change the College Avenue stop design?
   a. What terminus-specific facilities will be required and how will they be accommodated? (Parking for employees, staging/layover tracks, larger pick-up / drop-off lanes, ...)
   b. What evidence do they have that College Avenue can be reasonably construed as Medford Hillside?
   c. How will satisfactory ridership levels be achieved without MVP?
3) What is the party line about the unceremonious elimination of Winthrop Street stop?
4) Are there other possibilities beyond College Avenue?

I can't promise that I managed to raise all those issues at that meeting, however, I made these notes and sent them to the other MGNA attendees that same day (text in brackets *[thus]* has been edited for clarity):

Here are points that I remember:
1) The Mystic Valley Parkway plan does (as suspected since the beginning of June) involve radical intrusion on 200 and 222 Boston Avenue.
   a. The *[redacted emotional adjective]* claim, which I first heard from McArdle, was repeated that even without the "indisposed train" track (the fifth track at MVP), the rail widening for the platform mandates it.
   b. The *[area of refuge]* is a Federal requirement (although I think there was some *[redacted emotional gerund]* that made me think that there are other possibilities to give pedestrians an escape without effectively lengthening the widened section of track.)
   c. They admitted that the first *[property]* on Piggott was at risk. (Perhaps this was not for discussion outside the meeting room?)
   d. They did not dismiss the possibility of relocating the "indisposed train" track to other positions on the ROW (just not too far from the end). Some false claims were made (By Wickham) that the ROW wasn't wide enough elsewhere. When pressured, she admitted that there was room. *[Or perhaps she just didn't see anything to gain by continuing the discussion.]*
   e. They acknowledge that, in addition to the purchase price of the property, the expense of relocating the businesses there would be part of the cost.
   f. They doubt that mitigation to the City for lost tax revenue is a cost to be borne by the project. When we met with McGlynn, he indicated that he expected otherwise.
   g. They assert that they are not in the business development business and didn't discuss what would be done with the surplus land after they built their station and parking garage. (Is this true or did I just zone out at this point?)
   h. <There are more comments on MVP after the College Avenue remarks.>
2) They acknowledged that multi-tier parking was under consideration for the MVP station.
   a. They mentioned a 300-car capacity. (For calibration, the existing two-tiers at 200 Boston accommodate roughly 200 cars by my count so this is a pretty small car-park. Can anyone estimate the size of the garage at the Medford Harvard-Vanguard building for comparison?)
   b. They had no comment about road capacity needed to fill and empty

the parking. *[Another MGNA affiliate]* says it'll be full by 6:30. If so, it wouldn't contribute much to traffic.

c. Woelfel denied that he ever used the dreaded "Alewife-style" terminology; Ken assured him that he did. *[A video of Woelfel using the words "One of the things that we're considering if we would do a Route 16 station is perhaps having a parking facility similar to Alewife so we'd probably look at it in a couple of ways to see it with a garage / without a garage and see what kind of impacts that has." can be found at http://www.vimeo.com/809573 about fifteen minutes in.]*

d. They recognized the need for building the structure in a way that can be expanded (presumably up) should the need arise.

e. There is no explanation how car contents amounting to a few busloads are going to make or break the ridership figures for this station.

3) EOT unabashedly insists that College Avenue is the Medford Hillside.
   a. Woelfel informs us that, in every discussion that they have had with state agencies, College Avenue was construed as the Hillside.
   b. He steadfastly believes that, current usage and historical usage to the contrary notwithstanding, EOT is at liberty to define "the Hillside" as they see fit.
   c. <How do you argue with that kind of logic?>
4) The College Avenue station as planned:
   a. Would not require much in the way of changes if MVP is not built (per Wickham).
   b. Does not require a parking facility to justify its cost (per Woelfel).
   c. Mysteriously,
      i. is cost-justified without a parking facility, even though MVP needs one to be cost-justified,
      ii. can get by with its feeble little drop-off lane as shown,
      iii. requires no employee parking (which I remember being a characteristic of termini. Wait ... "terminus" might be a third declension noun which would make its plural "termina" ... I'll look this up and get back to you.)
5) *[This item does not describe something that transpired at the meeting but rather later reflection.]* I think what this says is, to get MVP built without a parking facility, the cost needs to be contained.
   a. I suggest NOT taking 200 and 222 and residential property on Piggott. That ought to reduce the cost quite a bit.
   b. I suggest
      i. finding a more real-estate-stingy emergency egress from the platform. (The egress could probably be to the north, perhaps a pork chop shaped refuge to the west onto the roof of the lobby.) *[I subsequently recognized the folly in this one.]*
      ii. resurrecting the track plans of the 6-Feb Workshop, which crowd the CR tracks to the east going under North Street allowing the GL tracks to clear 200 and 222 before they bend west to approach the platform.

   However, I wasn't quick enough to offer all of this in the meeting.
6) When I charged outright that the design for MVP was intended as a poison pill to avoid the trouble of building it *[and the unpleasantness of dealing with some of Medford's resistant elements]*:
   a. Woelfel denied it emphatically.
   b. He said that there were other communities that were worse than Medford.

Supporting material regarding inadequacies in the DEIR

A pattern of EOT's lapses in communication:

- Promised follow-ups to the station workshops that were to have been convened in June 2008 never occurred.
- Promises to have an MBTA representative at Advisory Group meetings were broken.
- The July 2008 which was to have included ridership studies was silently never convened.
- The August 2008 which was to have included conceptual plans and cost estimates covered neither.
- The September 2008 meeting with environmental analysis was cancelled.

EOT's contempt for historical imperative and indifference to public comment:
As a Public Comment to the 2008 SIP, I submitted 44 pages reporting the findings of some research I had done attempting to ascertain what does and does not constitute "Medford Hillside". The conclusion was pretty clearly that College Avenue was not part of Medford Hillside and that the Hillside's center of gravity is well north of College Avenue. Here is the extent of EOT's response to that research (the "C" is one sentence from the comment's cover letter, the "R" is the extend of the response to the entire comment):

C: *If, as I fear, your current plans for a Mystic Valley Parkway station are imperiled due to expense, I urge you to undertake whatever redesign is necessary to render that station viable. Whether you do that or not, if you intend to satisfy your mandate to extend the Green Line to Medford Hillside, you must take it as far as Winthrop Street.*

R: The SIP does not require that the Green Line Extension serve the full extent of what residents may consider to be the Medford Hillside neighborhood; rather the Green Line is required to be extended to Medford Hillside, and College Avenue is commonly considered to be within the boundaries of the Medford Hillside neighborhood. Therefore, we believe that terminating the Green Line Extension at College Avenue would meet the minimum requirements of the SIP. All of that being said, EOT has not yet made a final decision on the terminus of the Green Line Extension.

Another commenter to the 2008 SIP, and the dismissive and condescending response:

C: *The SIP requires that the Green Line extension serve "Medford Hillside." A station at College Avenue/Boston Avenue, which is being considered as a terminus for the extension, would sit at the extreme southern boundary of "Medford Hillside" and would be nearly a mile away from portions of what is considered the "Medford Hillside" neighborhood.*

R: EOT understands and appreciates that some segments of the Medford Hillside community believe that a Green Line station at College Avenue wouldn't fully serve the Medford Hillside neighborhood. Nevertheless, we believe that terminating the Green Line Extension at College Avenue – a decision in no way finalized – would meet the requirements of the SIP.

EOT / MassDOT have never provided evidence to support their contention that College Avenue is part of Medford Hillside. Their claims have been disproved that one particular source (Medford Community Development Plan (2004), The Cecil Group, Inc., planning consultants) supports their definition. They have never offered rebuttal to the preponderance of the evidence that Medford Hillside is well north of College Avenue. They have never contested the relevance of the fact that College Avenue is outside Medford Hillside. Instead they have stubbornly, imperiously and repeatedly pronounced that College Avenue is Medford Hillside, which is patently, demonstrably and incontrovertibly untrue.

In the summer of 2009, MGNA assembled a group of engineers, architects, commercial property managers and other stakeholders, and approached EOT, attempting to convene a charrette-style

meeting to improve the quality and outcome of the Route 16 terminus section of the DEIR. Here is a digest of the ensuing email conversation:

MGNA April 2, 2009:

> The Medford Green Line Neighborhood Alliance is planning to hold a charrette-style workshop this spring to discuss issues and ideas related to the proposed Route 16 terminus station on the Green Line extension.
>
> The purpose is to bring together all stakeholders and interested parties to discuss issues, ideas, concerns, challenges, obstacles and solutions to creating a successful station at this location.
>
> Invitees will include public officials, property owners, representatives of government agencies, architects, local urban and transportation planners, citizen groups and others. The public will also be invited to attend.
>
> First and foremost, we would like to have a representative from EOT (and VHB and the MBTA, if possible) attend so we can from the start understand the requirements for the project from the standpoint of those who will design, build and operate it. It would also be useful if we could borrow EOT's latest aerial map and Route 16 station schematics for reference.
>
> Would you or a representative from EOT be willing to commit to attending such a workshop, if not for the entire time but at least for say the first hour, to provide the information we need? (Presumably the DEIR will have been filed by the date of our charrette, which would likely be some time in May.)
>
> Ideally, we would like to have the event on a Saturday morning when more people from the community can attend, but we know that is an imposition on the professional agencies. Other options would be a weeknight (say, 6 to 9 p.m.) or a weekday afternoon (say, 3 to 6 p.m.).

EOT April 2, 2009:

> Yes, we would be happy to participate in this. A Saturday wouldn't work, but either an afternoon or an evening slot should be fine (Mondays and Wednesdays work for me). This is actually my last day in the office before vacation - I'm back on April 15th - but perhaps you could send along a few suggested timeslots? We can nail it down once I'm back.
>
> Would you be looking for the project team to give an overview presentation? Also, we'll need to be very clear with participants about the limits of what we do and do not know at this point about potential property acquisition.

MGNA April 16, 2009:

> Welcome back. I hope you had a nice vacation.
>
> I wanted to follow up with you on possible dates for the Route 16 charrette that we discussed. Can you provide your availability or preference for the following dates:
>
> Monday, May 4
>
> Wednesday, May 6
>
> Monday, May 11
>
> Wednesday, May 13

EOT April 16, 2009:

> Before we move too much further on the planning about this, can we have a phone conversation about your expectations of us for the event? Please give me a call next week so that we can chat.

MGNA April 21, 2009:

> Thanks for speaking with me about the charrette idea.

EOT April 21, 2009:

> Please keep me posted on the charrette idea.

MGNA April 30, 2009:

> Thanks for posting the Green Line design guidelines. I think they will be helpful.
>
> We are still trying to get our ducks in a row regarding the Route 16 charrette. It turns out, May 6 doesn't work for many people, so we're looking at other dates.

EOT May 6, 2009:

> You're welcome for the guidelines. Please let us know if you have any questions.
>
> On the charrette, given everything - particularly limited staff availability - I think it's best if we don't participate. We look forward to hearing about any ideas or suggestions that come out of it, though.

EOT's charade at involving the public:

In addition to the numerous public meetings, EOT established information channels for them to communicate with the general public. These channels had provisions to submit comments and questions to EOT with the promise of consideration and reply. Sadly, based on my experiences, these were little more than feel-good efforts. The responses to my comments and questions were so delinquent that I had difficulty remembering submitting them in the first place. The responses demonstrated that little, if any, attention had been paid to the comment.

Here is a May 26, 2009 message to a public affairs consulting firm retained by EOT. I received a nice reply the same day, promising a more thorough reaction to my concerns "next week":

> At the end of the 20-May Cambridge Community Meeting, you suggested to the audience that they could get answers to their questions if they submitted them at the Green Line Extension web site. After the meeting, I approached you and took issue with that claim, citing the disappointing response time that I had experienced using that vehicle.
>
> My (faulty) memory was that questions got answered in sixty days – no more, no less.
>
> In fact, I have submitted three comments through the Contact Us link at the web site and I received replies as follows:
>
> The response to an 8-May-2008 comment was received on 8-Jul-2008. (61 days)
> The response to a 6-Jul-2008 comment was received on 18-Aug-2008. (43 days)
> The response to a 7-Feb-2009 comment was received on 4-May-2009. (86 days)
>
> So, my (paranoid) suspicion – that responses were being deliberately delayed then sent to meet a hard deadline of sixty days – was obviously unfounded. I have worked for companies that had an order fulfillment policy along those lines (always deliver in a week to ten days even if you could deliver sooner) and I think the policy was based on the belief that people prefer consistent response to occasionally fast, occasionally slower. I suspected that a similar situation existed here.
>
> I will leave to you to decide whether an average time of 63 days meets your company's goals ... it did not meet my expectations. For comments/questions that are particularly complicated or involved a response could reasonably take a while. But, in those cases, I think it's fair to expect an acknowledgement of the comment/question although if it read something like "Thank you for your feedback. Your input is important to us and we are spending our every waking hour composing an answer." that would probably do more

harm than good.

Besides the speed of the responses, in two cases I was disappointed with the *content* of the responses. The 8-May comment included six points that I put a significant amount of thought into. It was nine paragraphs and 677 words. The response was two sentences long (27 words) and content-free. The 6-Jul question asked about the scheduling for a July meeting and the minutes for the June meeting. The 18-Aug answer referenced an upcoming September meeting (as if July and August had never existed), promised a project schedule (which appears never to have been posted) in advance of a September Advisory Group meeting (which never occurred).

I appreciate, *[person's name]*, that *[company name]* is not in a position to manufacture and deliver answers unilaterally to every cockamamie question that we, the general public, can dream up. I hope you recognize though, that when you offer to answer questions but then don't do so in a timely fashion (for whatever reason), it is *you* who appears to be delinquent.

[closing comment immaterial to this discussion]

Regards,
JRE

July 30, 2009, two months later, without receiving any further communication on this subject, I reopened the discussion. After a few messages back and forth, I concluded with this:

Y'know *[person's name]*, the important matter is not whether someone like me gets, in a timely fashion, the information he thinks he needs and insists that he is entitled to ... someone like me *will* get what he wants one way or another. The more important matter is the damage it does to the reputation and appearance (perhaps illusion) of trustworthiness of your client when, in a public forum, the attendees are invited and encouraged to raise their concerns and submit their questions. But then, by the time the flaccid tepid reply arrives, the citizen who spoke up has (understandably, if not justifiably) arrived at an indelible impression that whatever supremely imperious government agency is running this show, it hasn't the slightest interest whatsoever in hearing from the people whose lives are affected. It's things like this that lend credence to the oft-repeated accusations by the Green Line Extension detractors that the community is being ignored and excluded from the process. They're going to level unfair criticisms enough ... no need to give them fair ones as well.

Notwithstanding the suspicion I have that some of the EOT/VHB people *[unsupportable accusation redacted]*, I naïvely believe that the things they are trying to do on this project have some overlap with what I think should be done. For that reason, I'm disappointed when I witness behavior that gives ammunition to the opponents to the project. I have seen herculean efforts (in no small part RVA's doings, I suppose) to reach out to the host communities' populations and I have been repeatedly astounded by claims that publicity for the project is inadequate. (What planet have these people been vacationing on for the last three years?) But you could hold a half-dozen neighborhood workshops interspersed with monthly meetings like clockwork for eighteen months then have the benefit entirely negated by the idiotic handling of the AG meetings of July, August and September last year. It would have been bad enough if they had been canceled with cause; it would have been worse if they had been unceremoniously *canceled*; they just didn't happen – no explanation, no announcement, no nothing. (Sheesh.)

I don't know if it's practical to hand-carve a prompt, well-considered reply to every crackpot who manages to stumble across the *Contact Us* link on the web site but if you're not prepared to do that, what's the point? I doubt you can expect much cure from the placebo effect.

Regards.

Supporting material regarding inadequacies in the DEIR

Attachments:

1) *In Search of Medford Hillside 1891-2008*, research by John Roland Elliott conducted in the summer of 2008
2) *Proposal for alternative track alignment at the Route 16 terminus station for the Green Line Extension*, deliverables of a working group assembled by MGNA during the summer of 2009
3) *Alternative Route 16 Track Alignment*, large scale drawing of possible track placement between North Street and Mystic Valley Parkway

MGNA
Medford Green Line Neighborhood Alliance
www.medfordgreenline.org
medfordgreenline@yahoo.com

Proposal for alternative track alignment at the Route 16 terminus station for the Green Line Extension

One of the primary objectives of the Medford Green Line Neighborhood Alliance (MGNA) is to ensure that the Green Line extension is designed, constructed, and ultimately operated in a manner that provides maximum benefit to the city and its residents. Over the last four years, MGNA members have been diligently involved in the process, engaging citizens, researching best practices, collecting data, and providing constructive input to the project team.

We have been heartened that MassDOT has embraced many of our recommendations, including selecting a Route 16 terminus station as its Preferred Alternative for the project; providing for no parking at any of the new Green Line stations, in particular at Route 16, where a 300-car garage was considered; and designing the project so that no residential properties need to be acquired.

However, over the last 18 months, MGNA has expressed concern to MassDOT regarding the designs presented for the Route 16 station, which indicated the likely removal of two commercial buildings to accommodate the Green Line tracks and platform.

The Draft Environmental Impact Report (DEIR) affirmed MassDOT's intention to remove the buildings at 200 and 222 Boston Avenue – to the detriment, in our opinion, of both the project and all stakeholders.

The removal of these buildings would displace numerous private businesses, Tufts University departments and laboratories, and a least 224 employees. It would also result in a decrease of at least $164,487 in annual property tax revenue to the city of Medford, and add at least $15.5 million to $20 million to the project cost.

Consequently, while the Preferred Alternative – with the terminus station at Route 16 – is shown to provide the greatest air quality improvements, ridership gains, traffic reduction, and benefit to environmental justice populations, the negative impacts of the commercial property takings make the station less feasible and have created opposition among Medford government and its taxpayers.

Cognizant of these issues, for the last several months an MGNA working group, using technical information provided by MassDOT, has explored alternative track alignments for a Route 16 station. The goal was to develop an alignment that has smaller property acquisition needs. By adjusting the track curvatures between North Street and Route 16 and changing the angle of the station platform itself, MGNA has developed an alignment

that accommodates the Green Line station without the need to remove or substantially alter the buildings at 200 and 222 Boston Avenue.

MGNA's interest in this undertaking is entirely for the benefit of the Green Line Extension and the communities it serves. The members of the working group have volunteered their time, have received no compensation from anyone and do not expect to. Specifically, MassDOT gave us information as we requested it but did not support us in any other way. The manager of some of the threatened structures and tenants housed therein have indicated that they would prefer not to lose the properties to the Green Line Extension; however, they have not provided any material support to the working group in its efforts. Likewise, even though the populations of Medford, Somerville, and Arlington are affected by the prospect of a station at Mystic Valley Parkway, the working group operated independently of any local government.

The Process

In order to understand the MBTA design constraints, the working group began by requesting the *Draft Schematic Design Guidelines – Green Line Extension Project*, which MassDOT provided in April 2009. These guidelines detailed the design characteristics that facilitate the following objectives:

- Safe operation
- Maintainable infrastructure
- Fair treatment of abutters
- Comfortable rides for both Commuter Rail and Green Line passengers

Further, in order to better understand the sensitivities of rail design, the working group also consulted publications of the Transit Cooperative Research Program sponsored by the Federal Transit Administration.

And to supplement our understanding of applicable principles, we referred to materials generously posted at the University of Denver website by Dr. James B. Calvert, emeritus engineering faculty member. Dr. Calvert's explanations made it possible for us to apply the constraints of the *Schematic Guidelines* using the tools that we already owned without incurring prohibitive expense.

Using these materials, the MGNA working group identified an alternative track alignment between North Street and Mystic Valley Parkway that eliminates the need to take the commercial buildings at 200 and 222 Boston Avenue, while observing the constraints of the *Schematic Guidelines*.

Essentially, in our proposed alignment, the constellation of tracks (two Commuter Rail, two Green Line) is relocated closer to the northeast boundary of the existing right-of-way, rather than being approximately centered in the right-of-way, as the trackwork is situated in other stretches of the extension corridor. This avoids the excessive track proximity to the east corner of 200 Boston Avenue and to the northeast walls of 200 Boston Avenue and 222 Boston Avenue.

More specifically, our alternative has these characteristics:

1. It is wholly confined within the existing railroad right-of-way except for a sliver taking from a commercial parking lot (Medford), one vacant commercial lot (Somerville) and one commercial building and lot (Somerville).
2. It uses curve radii well within the *Schematic Guidelines'* specifications, typically double the minimum and sometimes triple the minimum, thereby improving passenger comfort, reducing risk of excessive noise and decreasing the torque on rolling stock that arises in approaches to banked trackwork.
3. Where conflicting constraints appear, it uses the more stringent specification, taking a conservative approach.
4. It achieves all spiral and tangent track goals including a tangent 450-foot platform and tangent platform approach, in order to avoid wheel squeal.
5. It eliminates the need to place trackwork on the very locations where the northeast walls of 200 and 222 Boston Avenue stand today.

A fully detailed description of the alignment is provided below, and conceptual drawings are attached.

Conclusion

MGNA put forward our alternative alignment for the tracks between North Street and Mystic Valley Parkway, and the reorientation of the station platform, in hopes that it can contribute to a design for the Route 16 terminus that does not necessitate taking the commercial properties at 200 and 222 Boston Avenue in Medford. There are doubtless other solutions that qualified engineering personnel could discover to achieve the same objectives, and we ask that one of these be included in the Final EIR/EA for the Green Line extension project, rather than the worst-case scenario that is presented in the DEIR/EA.

References

[1] *Draft Schematic Design Guidelines – Green Line Extension Project* – April 2009 – VHB/Vanasse Hangen Brustlin, Inc., *et al.*
[2] *Track Design Handbook for Light Rail Transit* – 1999 – Transit Cooperative Research Program Report 57 – sponsored by the Federal Transit Administration
[3] *Beyond Lechmere Northwest Corridor Study* – August 2005 – VHB/Vanasse Hangen Brustlin, Inc., *et al.*
[4] *Degree of Curvature* – James B. Calvert, University of Denver – last revised 20-Jun-2004

Details

Relocation of Commuter Rail tracks to shift them away from the threatened properties:

- 900-foot compound curve ("S" curve) comprising two 200-foot circular curves with spiral transitions separated in the center with a 100-foot tangent.
- Heading south, the compound curve begins at the south bridgehead of the Mystic Valley Parkway Bridge and completes approximately even with the east corner of 200 Boston Avenue.
- Shifts tracks 22 feet to the north-east (away from 200 Boston Avenue and 222 Boston Avenue) instead 13 feet, which the DEIR alignment achieves.
- Conforms to design standards as follows:
  - Limits circular radius to 7640 feet (corresponding to 0°45'00" degree of curvature) compared to a preferred minimum of 4297 feet (corresponding to 1°20'00" degree of curvature) – [1] § *1.2.9.1 Commuter Rail Geometric Design*
  - With 0°45'00" curves, meets 60 miles per hour design speed with <½ inch superelevation – [2] extrapolation from *Table 3.2.2b Desired Superelevation and Minimum Spiral Curve Length (English Units)*
  - Includes four 100-foot spiral transitions (into and out of each of the two opposed circular curves) – [1] § *1.2.9.1 Commuter Rail Geometric Design*
  - Includes 100 foot tangent track at spiral reversal – [1] § *1.2.9.1 Commuter Rail Geometric Design*
  - Minimum clearance from right-of-way property line to centerline of closest track is 12½ feet *vs. Guidelines'* 8½ feet minimum and 10 feet preferred clearance to retaining wall – [1] *Figure 1-8 Typical Section*
  - Centerline clearances between adjacent tracks on tangents is 13 feet (greater on curves) as per *Guidelines* – [1] *Figure 1-8 Typical Section*
- Not shown in this drawing, between North Street and Winthrop Street, additional curved trackwork returns the track constellation to an alignment roughly centered in the railroad right-of-way, the position it occupies for most of the extension corridor.

Placement of Green Line tracks to clear the affected preexisting structures:

- 400-foot simple curve comprising one circular curve with spiral transitions
- Heading north, the outbound track curve begins 125 feet north of North Street bridge; inbound track curve begins just south of North Street bridge
- Adheres to design standards as follows:
  - Minimum clearance from adjacent pre-existing structures at 200 Boston Avenue and 222 Boston Avenue to centerline of closest track is 13¼ feet vs. *Guidelines'* 8 feet preferred and 6½ feet allowed with niches – [1] § *1.2.9.2 Light Rail Geometric Design*, [1] *Figure 1-8 Typical Section*
  - Includes a single 200-foot circular curve with minimum radius of 3274.3 feet (corresponding to 1°45'00" degree of curvature) compared to minimum preferred 1000 feet (corresponding to 5°43'00" degree of curvature) – [1] § *1.2.9.2 Light Rail Geometric Design*

- Includes two 100-foot spiral transitions (into and out of circular curve) – [1] § *1.2.9.2 Light Rail Geometric Design*
- Includes the 450-foot platform required for terminal stations – [1] § *1.2.11 Table 1-5 Station Requirements*
- Provides a 20 foot wide platform, consistent with the DEIR (this dimension is unspecified in [1] without ridership forecasts – see [1] § *1.2.11.3 Access*)
- An Area of Refuge (point of safety) is located at the south end of the platform – [1] § *1.2.11.3 Access*
- Provides a tangent-track (0°00'00") platform even though curves as tight as 2°00'00" are allowed – [1] § *1.2.9.2 Light Rail Stations*
- Includes 100-foot tangent track approaching platform – [1] § *1.2.9.2 Light Rail Stations*
- Centerline clearances between adjacent Green Line tracks on tangents is 13 feet, consistent with preferred spacing (although 12-foot spacing is allowed) – [1] § *1.2.9.2 Light Rail Geometric Design Minimum distance between centerline of tracks*

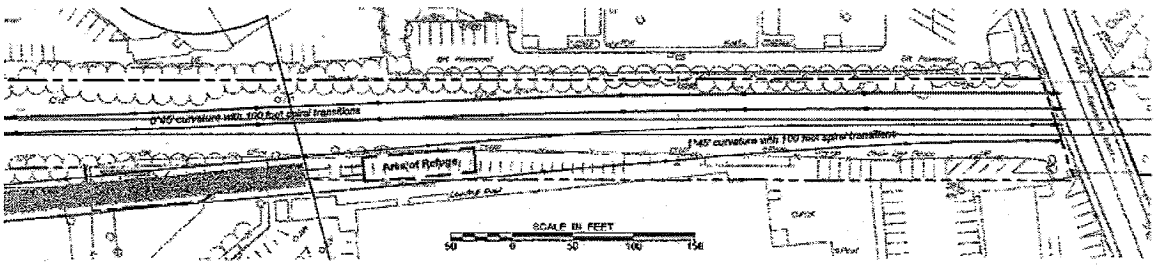
- Not shown in this drawing, between North Street and Winthrop Street, additional curved trackwork returns the track constellation to an alignment roughly centered in the railroad right-of-way, the position it occupies for most of the extension corridor.

Contact Information

For more information, please contact

John Roland Elliott, MGNA Working Group Principal
johnrolandelliott@comcast.net
617-905-8675 (m)

Ken Krause, MGNA Working Group Participant
kenneth.krause@comcast.net
781-874-0920 (w)

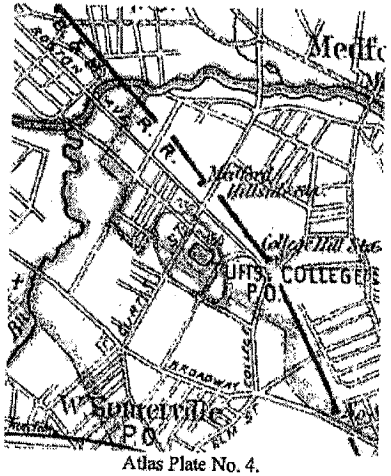


Alternative Route 16 Track Alignment

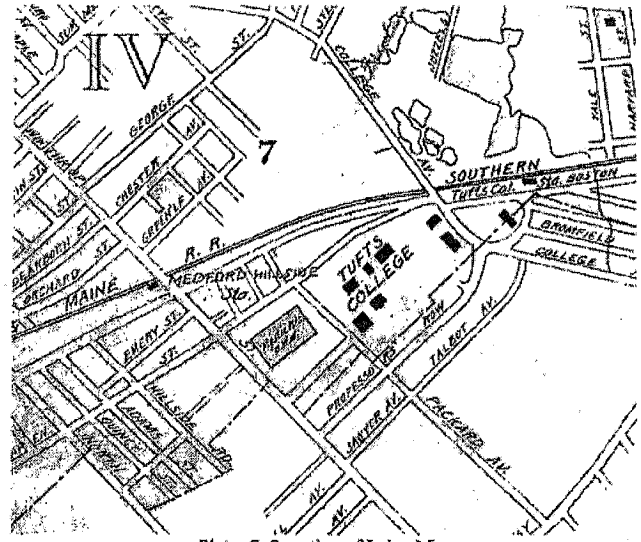
In Search Of Medford Hillside 1891 – 2008

Pages	Section	Abstract
2-5	*Historical Maps from the Medford Public Library Map Collection.*	Places named Hillside are consistently at Winthrop Street or north of it.
6-7	*Modern Maps from the Medford Public Library Map Collection.*	One map showing Medford Hillside north of North Street; one showing Medford Hillside between College Avenue and Winthrop Street northeast of Boston Avenue.
8-11	*Historical Excerpts from the Medford Public Library General Reference Holdings.*	A definition of Medford Hillside as the northwesterly slope of College Hill. Mention of Winthrop Street and North Street as the two "rangeways" through the Hillside territory. Mention of Capen Street, Quincy Street, 286 Boston Avenue (all north of Winthrop) and Harold Street and Pinkham Road (both north of North Street) as Medford Hillside.
12-16	*Germane Content from Various Government Agencies.*	Excerpts and maps from the EOT's Beyond Lechmere Study; data and maps from US Geological Survey (USGS) Geographical Names Information System (GNIS); a map from EPA; all showing Medford Hillside situated north of Winthrop Street and closer to North Street than to Winthrop.
17-19	*Contemporary Photographs of locations with "Hillside" in their names.*	Seven photos of landmarks and businesses, all at, or north of Winthrop Street.
20-34	*Modern Maps from Internet Mapping Web Sites.*	Ten maps, all supporting placement of Medford Hillside north of Winthrop Street. A map showing the locations of 127 Hillside businesses, churches and organizations clustering north of Winthrop Street. A table of those businesses with distances from each to a possible station at Mystic Valley Parkway, Winthrop Street and College Avenue. Average distance to College Avenue is roughly twice either Winthrop Street or Mystic Valley Parkway.
35-44	*Newspaper References (Articles, Obituaries, Real Estate Transactions, Classified Ads) Locating Medford Hillside.*	37 excerpts from newspapers from 1889 to 2006 mentioning neighborhood streets and overwhelmingly placing Winthrop Street as the de facto southern boundary of Medford Hillside.

Historical Maps
from the Medford Public Library
Map Collection



Atlas Plate No. 4.
Atlas of Massachusetts
O. W. Walker, C.E.
Geo. H. Walker & Co., Publisher, 1891
(showing Medford Hillside Station at Winthrop Street and Boston Avenue
and College Hill Station at College Avenue and Boston Avenue)



Plates 7, 8 portion of Index Map
(north is upper right corner)
Atlas of the City of Medford
from Official Plans and Actual Surveys
Geo. W. Stadly & Co., Publishers, 1898
(showing distinct Medford Hillside Station and Tufts College Station.
What is now called Hillsdale Road is labeled "Hillside Rd." on this map)

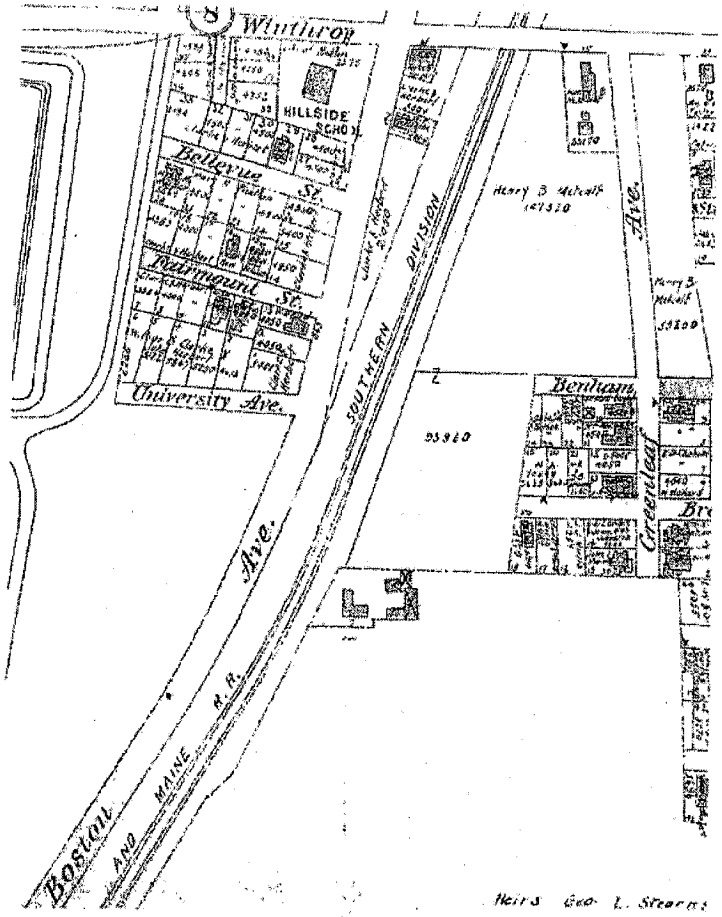


Plate 7
(north is upper right corner)
Atlas of the City of Medford
from Official Plans and Actual Surveys
Geo. W. Stadly & Co., Publishers, 1898
(showing Hillside School at Winthrop Street and Boston Avenue)

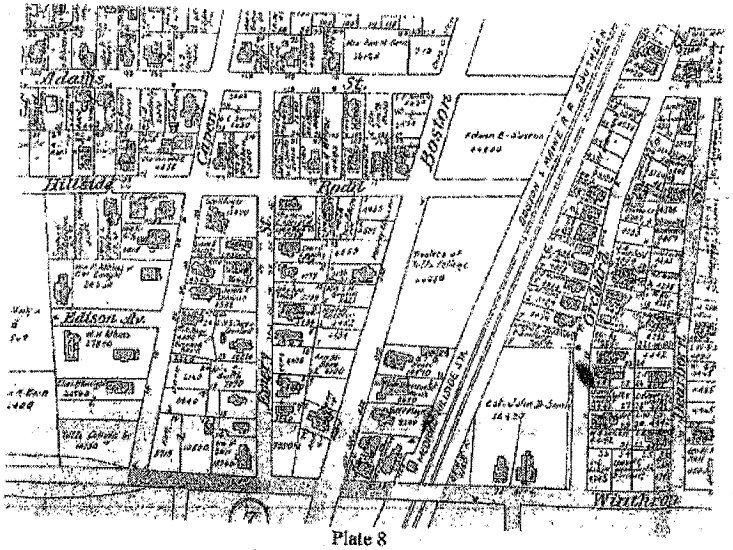
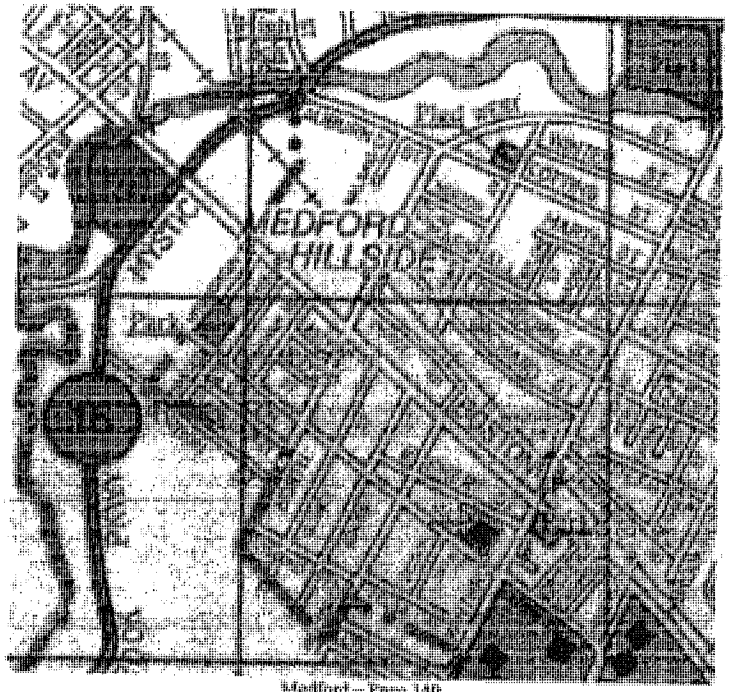


Plate 8
(north is upper right corner)
Atlas of the City of Medford
from Official Plans and Actual Surveys
Geo. W. Stadly & Co., Publishers, 1898
(showing area north of Winthrop Street and Boston Avenue intersection
Including Medford Hillside Station, Hillside Universalist Church and Hillside Road)

Modern Maps
from the Medford Public Library
Map Collection



Medford – Page 146
American Map – Metro Boston – Eighth Edition
(showing Medford Hillside between College Avenue and Winthrop Street, closer to Winthrop Street and east of Boston Avenue)



Medford – Page 140

Universal Atlas of Metropolitan Boston & Eastern Massachusetts
(showing Medford Hillside at Walkling Court,
east of right-of-way, north of North Street)

Historical Excerpts from the Medford Public Library General Reference Holdings

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MEDFORD HILLSIDE.

There are many of them, but the term is distinctively applied to but one, the northwestern slope of Walnut, now for half a century called College hill. As a portion of the so-called Hillside district is included in the level plain beside the railway, and its development has been in a way different from the real Hillside, this sketch will deal with that mainly.

...

From early times there had been two "rangeways" through this territory, from Menotomy road to the Mystic, one became Winthrop street in Medford, the other North street. The first proved the most convenient stopping place for the Medford patrons of the railroad, which laid its track between two towns all the way from Boston to Lowell.

Medford Hillside
Vol. XX 1917, p.5
The Medford Historical Register
Published by Medford Historical Society
(defining Medford Hillside as the northwestern slope of College Hill and traversed by Winthrop and North Streets)

West Medford in 1870
Moses Whitcher Mann

...

Three buildings crowned the top of Walnut Tree Hill, as it was formerly called, the beginning of Tufts College; and the depot across the track, as was also the college site, became known as College Hill.

145

...

Just back from College Hill on the right, sheltered by the trees and hedges, was, and still is, the Stearns residence. With its brick windmill tower it was an attractive sight, to which was added the interest of its connection with another railway, the Underground Railroad of antebellum days.

Passing the old station of Medford Steps with its long stairway—this was on the right hand—and under a bridge now removed, and emerging from the railway cut, the most noticeable object was the First Parish Church, with its several-storied steeple, one of which contained the original town clock presented by Mr. Brooks, while higher up was the bell cast by Paul Revere.

West Medford in 1870
pp. 145, 146
Glimpses of Medford
Selections from the Historical Register
History Press 2007
(describing College Hill depot, in the location proposed for the Green Line Terminus, and Medford Steps, later the site of the Medford Hillside station, as two distinct places)

Historical Excerpts from Various Printed Material Scanned and Indexed Available on the Internet

MEDFORD HILLSIDE

Blackmer, Horace Barnabas [A.B. 1910, *Mass. Ed.*] 34 Capen St.

MEDFORD HILLSIDE *(continued)*

Kimball, Earle Raines [A.B. 1911, *Merc.*] 280 Boston Ave.

Harvard Alumni Directory
Harvard University, Harvard Alumni Association, 1914
(indicating Capen Street and 286 Boston Avenue, both north of Winthrop Street, are in Medford Hillside)

He resides at 18 Quincy street, Medford Hillside, where he bought a house and later built a barn. He is a Republican in politics and a Universalist in religion.

Page 1839
Genealogical and Personal Memoirs
Relating to the Families of Boston and Eastern Massachusetts
edited by William Richard Cutter
Published by Lewis historical publishing company, 1908
(indicating that Quincy Street is in Medford Hillside)

Longo, Domenico	61 Humboldt Ave., Roxbury	B352
Longstreet, George B.	26 Harold St., Medford Hillside	E475
Longwill, James M.	19 Belgrade Pl., Springfield	E174
Loomis, Chas. H.	12 Highland St., Waltham	B1415
Lord, Andrew W.	14 Sanford St., Mattapan	E2611
Arthur O.	Gen. del., Salem	E3680
Eugene R.	67 Washington St., Gloucester	B1323
Geo. C.	49 Hillside Ave., Providence, R. I.	E509
Harry	248 Boylston St., Boston	B1852
Harry S., Jr.	23 Glendale St., Everett	E2938
Peter	20 Acorn St., New Bedford	B1931
Ralph F.	44 Pinkham Rd., Medford Hillside	B11
Robert S.	Griswoldville	B1600
Thomas, Jr.	143 Belleville Rd., New Bedford	B1867
Wm. D.	85 Burrill Ave., Lynn	B1877
Lordán, Dennis F.	527 Medford St., Charlestown	B1410

Laws Relating to Licensing of Electricians and List of Electricians Registered by the Massachusetts State Examiners of Electricians as of Record ...

By Massachusetts State Examiners of Electricians, State Examiners of Electricians, Massachusetts

Published by State Examiners of Electricians, 1921

(indicating that Harold Street and Pinkham Road, both north of North Street, are in Medford Hillside)

Germane Content
from Various Government Agencies

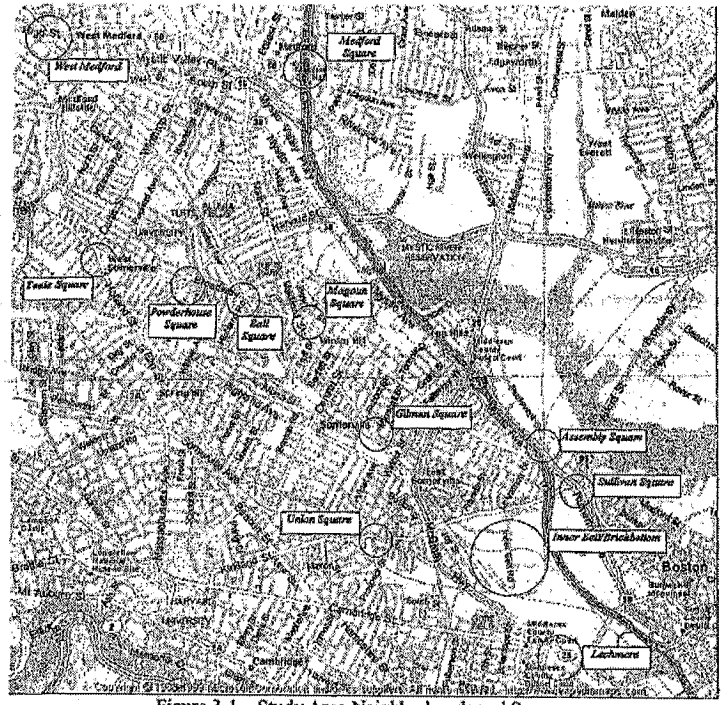


Figure 3-1 – Study Area Neighborhoods and Squares
From section 3.1 Description of Study Area
Beyond Lechmere Northwest Corridor Study
https://www.commentmgr.com/projects/1228/docs/MIS8-05-Chapter3.pdf
(showing Medford Hillside adjacent to Mystic Valley Parkway,
well north of Winthrop and North Streets and southwest of Boston Avenue)

Medford Hillside is the area extending north from Powderhouse Square through Tufts University and over the Mystic River into West Medford. With its residential, educational and commercial land uses, it is an important center in the study area that could support improved transit service. Boston Avenue is a primary roadway through Medford Hillside that has urban centers and activity centers at the intersection of Winthrop Street and along the section from College Avenue to Arlington Street.

3.7.1.1 Existing Land Use Patterns (excerpt) p. 3-44
Beyond Lechmere Northwest Corridor Study
https://www.commentmgr.com/projects/1228/docs/MIS8-05-Chapter3.pdf
(asserting that Medford Hillside follows Boston Avenue continuing to the north bank of the river into West Medford.)

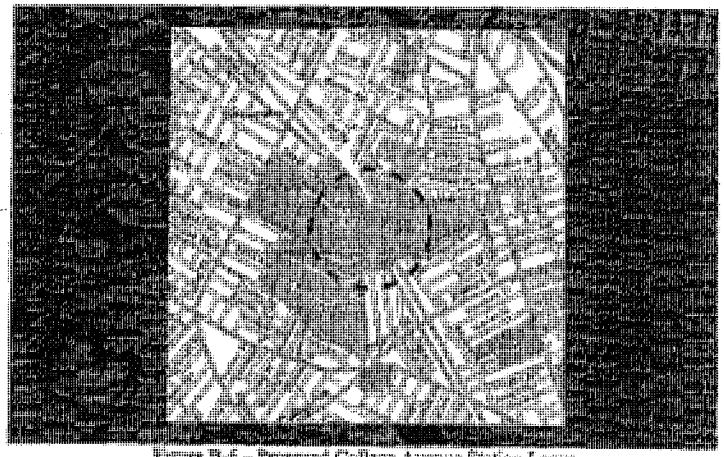


Figure B-5 – Proposed College Avenue Station Locus
Beyond Lechmere Northwest Corridor Study
(showing Medford Hillside at intersection of Capen and Adams Streets, southwest of Boston Avenue, northwest of Winthrop Street, ¾ of a mile from College station)

USGS
Geographic Names Information System (GNIS)

Feature Detail Report

Feature ID:	612779
Name:	Medford Hillside
Class:	Populated Place
Description:	On the right bank of the Mystic River 0.8 mi SW of Medford C.H.; City of Medford.
Citation:	Collected during Phase I data compilation (1976-1981), primarily from U.S. Geological Survey 1:24,000-scale topographic maps (or 1:25K, Puerto Rico 1:20K), various edition dates, and from U.S. Board on Geographic Names files.
Entry Date:	24-Feb-1974
Elevation(ft/m)*:	62/19

Census Code	Class Code	GSA Code	OPM Code
39870	U4	-	-

Class Code Description: Populated (Community) Place (except those associated with facilities). Official common name for a populated location within an incorporated place.

Counties

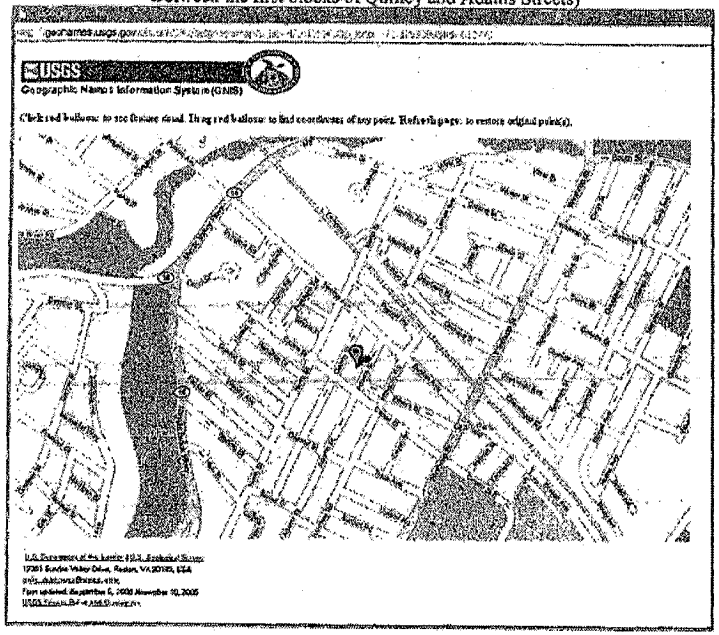
Sequence	County	Code	State	Code	Country
1	Middlesex	017	Massachusetts	25	US

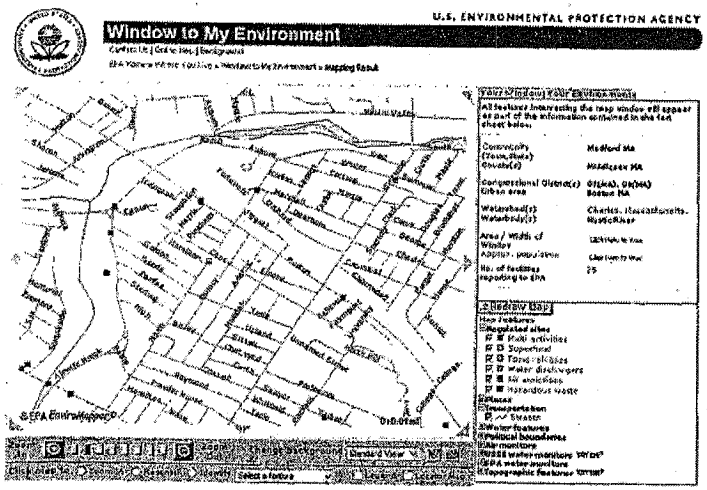
Coordinates (One point per USGS topographic map containing the feature, NAD83)

Sequence	Latitude(DEC)	Longitude(DEC)	Latitude(DMS)	Longitude(DMS)	Map Name
1	42.4125963	-71.1253309	422445N	0710731W	Lexington

http://geonames.usgs.gov/pls/gnispublic/f?p=gnispq:3::NO::P3_FID:612779
(revealing Latitude / Longitude coordinates)

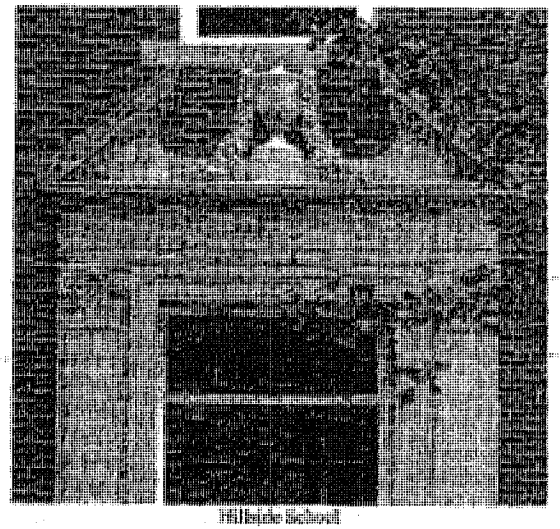
Medford Hillside by Latitude and Longitude
U. S. Geological Survey (USGS)
Geographical Names Information System (GNIS)
http://tinyurl.com/5g4mkr
(showing Medford Hillside southwest of Boston Avenue
Between the first blocks of Quincy and Adams Streets)



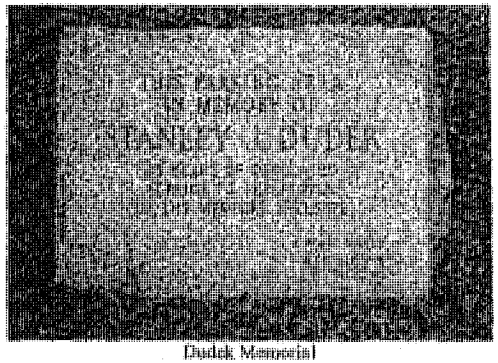


Medford Hillside by Latitude and Longitude
USGS / GNIS data on EPA EnviroMapper (crosshairs added)
http://tinyurl.com/65q6a9
(showing Medford Hillside southwest of Boston Avenue
Between the first blocks of Quincy and Adams Streets)

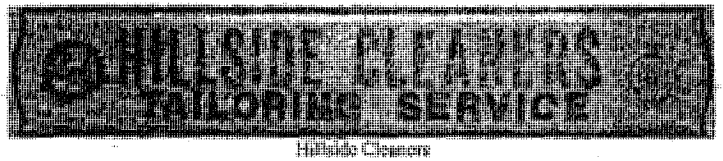
Contemporary Photographs
of locations with "Hillside" in their names



Hillside School
15 Capen Street
(placing Medford Hillside north of Winthrop Street)



Dudek Memorial
Between 308 and 320 Boston Avenue
(placing Medford Hillside north of Winthrop Street)



Hillside Cleaners
334 Boston Avenue
(placing Medford Hillside at Winthrop Street and Boston Avenue)



Hillside Real Estate
308 Boston Avenue
(placing Medford Hillside north of Winthrop Street)



Hillside Business Services
308 Boston Avenue
(placing Medford Hillside north of Winthrop Street)

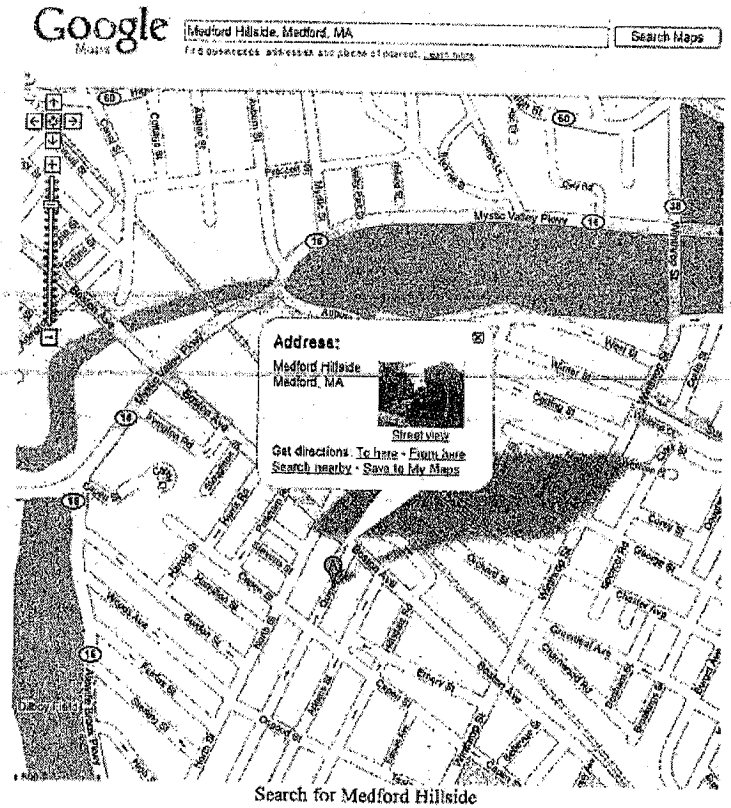


Hillside Hardware
325 Boston Avenue
(placing Medford Hillside north of Winthrop Street)



Hillside Wine & Spirits
323 Boston Avenue
(placing Medford Hillside north of Winthrop Street)

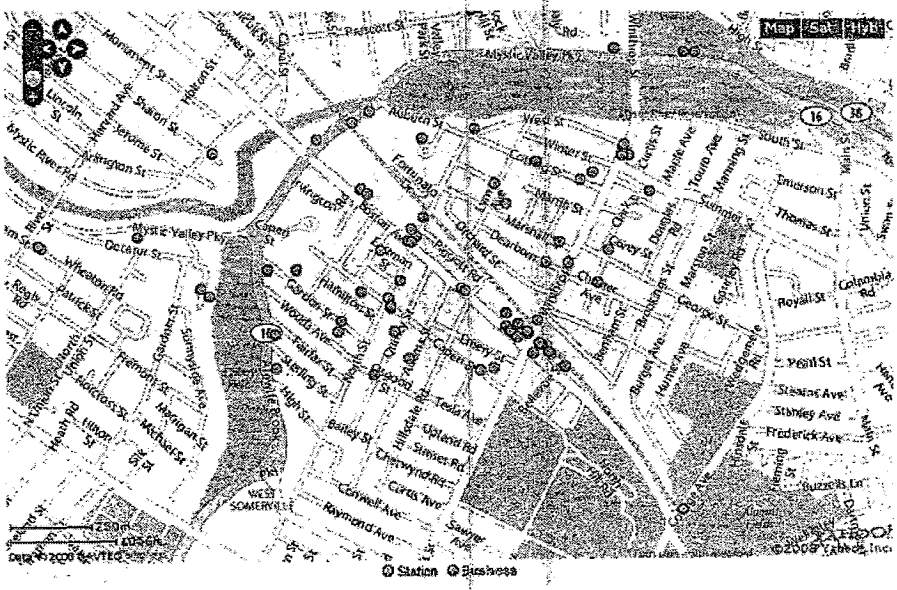
Modern Maps from Internet Mapping Web Sites



Search for Medford Hillside
Google Maps
http://tinyurl.com/5b5kbq
(locating Medford Hillside in the first block of Quincy Street, west of Boston Avenue, north of Winthrop Street)

Medford Hillside Businesses
BatchGeocode plot of CitySquares data
http://tinyurl.com/666sn9
(showing Medford Hillside surrounding
Boston Avenue north of Winthrop Street to the river)

BatchGeocode.com plot of Medford Hillside Businesses as identified by CitySquares.com



Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
24 Hour A 1 Emerg Medford Lo...	178 Winthrop St	Medford	0.33	0.49	0.65
A Airport Service	81 Quincy St	Medford	0.31	0.46	0.61
A Cab	81 Quincy St	Medford	0.31	0.46	0.61
Abbas Place	241 Boston Ave	Medford	0.27	0.23	0.69
American Access Care	200 Boston Ave	Medford	0.38	0.13	0.80
American Legion	321 Winthrop St	Medford	0.73	0.58	1.06
Americas Finest Construction	181 Winthrop St	Medford	0.34	0.50	0.64
Ancora Pharmaceuticals	200 Boston Ave	Medford	0.38	0.13	0.80
Andreas House Of Pizza	352 Boston Ave	Medford	0.07	0.55	0.37
Ant Hill Technologies Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Azzarello Joe Plaster Co Inc	53 Marshall St	Medford	0.22	0.31	0.64
Base Two Investment Systems ...	196 Boston Ave	Medford	0.40	0.12	0.82
Betty & Helens Nail Salon	243 Boston Ave # A	Medford	0.64	1.00	0.96
Brainshift Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Brookside Condominium Associ...	1 Arizona Ter	Arlington	0.59	0.41	0.93
Bsm Livery Service	16 Cotting St	Medford	0.27	0.42	0.62
Bureau Art	216 High St	Medford	0.61	0.53	0.94
Burnham Corp	14 Marshall St	Medford	0.15	0.43	0.53
C 3 Technologies	29 Hamilton St	Medford	0.32	0.31	0.70
Cadnexus	200 Boston Ave	Medford	0.38	0.13	0.80
Calveric Barbara R	196 Boston Ave	Medford	0.40	0.12	0.82
Celtic Floor Craft	90 North St	Medford	0.26	0.30	0.65
Clean N Brite Laundromat	317 Boston Ave	Medford	0.06	0.47	0.45
Cleaning Solution	165 Sharon St	Medford	0.66	0.26	1.06
Clevergreen Cleaners	152 North Street	Medford	0.26	0.34	0.64
Cotting Plumbing & Heating C...	9 Cotting St	Medford	0.26	0.44	0.63
Cozy Corner Makes Scents Cer...	317 Boston Ave	Medford	0.06	0.47	0.45
Craddock Cove Condominium	2500 Mystic Valley Pkwy	Medford	0.55	0.61	0.83
Danish Pastry House	330 Boston Ave	Medford	0.03	0.49	0.42
Decatur Gardens	95 Decatur St	Arlington	0.74	0.44	1.10

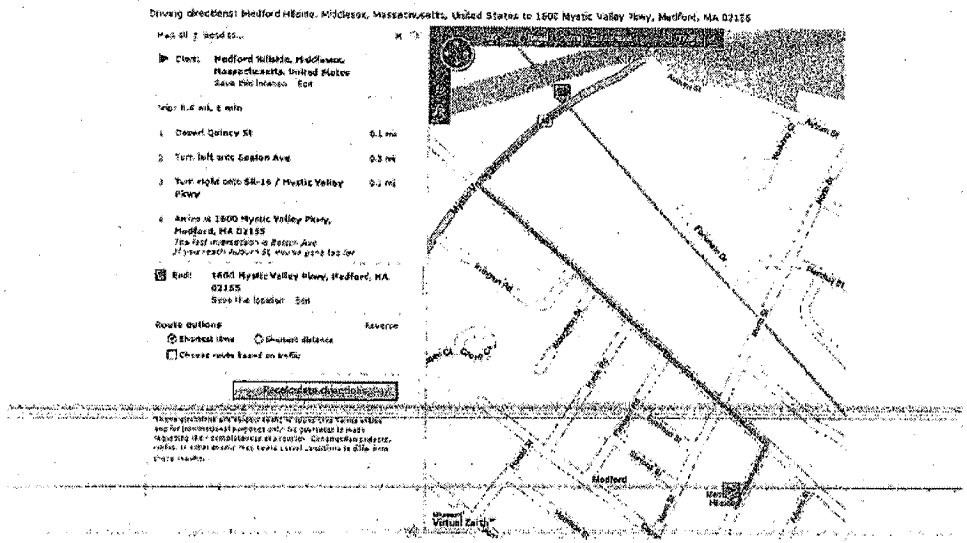
Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Doucettes Gas	325 Alewife Brook Pkwy	Somerville	0.48	0.46	0.77
East Coast Roofing Repair	14 Wolcott Park	Medford	0.57	0.29	0.98
Elgix Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Elizabeth Grady Of Medford	55 North St	Medford	0.28	0.21	0.70
Emergency Locksmith A	325 Alewife Brook Pkwy	Somerville	0.48	0.46	0.77
Espresso Pizza	336 Boston Ave	Medford	0.04	0.52	0.39
Family Center Incorp The Som	18 Dearborn St	Medford	0.11	0.43	0.51
Filteau Theodore Piano Tunin...	26 Pinkham Rd	Medford	0.31	0.24	0.72
G Creabtive Studios	105 North St	Medford	0.27	0.32	0.65
Gervais & Davenport PC	200 Boston Ave	Medford	0.38	0.13	0.80
Gnomon Copy	348 Boston Ave	Medford	0.06	0.54	0.37
Goldstar Convenient Store	319 Boston Ave	Medford	0.05	0.47	0.45
Health Care Source	196 Boston Ave	Medford	0.40	0.12	0.82
Helens Roast Beef & Pizzerin...	321 Boston Ave	Medford	0.05	0.48	0.44
Hillside Business Services	308 Boston Ave	Medford	0.06	0.44	0.48
Hillside Cleaners Inc	334 Boston Ave	Medford	0.04	0.52	0.39
Hillside Real Estate	308 Boston Ave	Medford	0.06	0.44	0.48
Hillside Wine & Spirits	323 Boston Ave	Medford	0.05	0.48	0.44
Immunosaccharde Technologies...	200 Boston Ave	Medford	0.38	0.13	0.80
Interactive Constructs	200 Boston Ave	Medford	0.38	0.13	0.80
Intergrated Health Services	300 Winthrop St	Medford	0.63	0.56	0.95
Jackson Home Inspection	12 Essex St	Medford	0.64	0.49	0.99
Krasner Sami	67 Gordon St	Somerville	0.44	0.29	0.82
Lily Nail	315 Boston Ave	Medford	0.06	0.46	0.46
Lussiano Mary	85 Decatur St	Arlington	0.74	0.44	1.10
Mahoney Phyllis	85 Decatur St	Arlington	0.74	0.44	1.10
Mars Cherne	14 Arizona Ter	Arlington	0.61	0.41	0.95
Martel Paul W & Paula	23 Yale Rd	Arlington	0.90	0.60	1.25
Martinez & Daughters Woodwor...	49 Quincy St	Medford	0.26	0.39	0.61
Mass Drapery & Blind Of Medf...	152 North St	Medford	0.26	0.34	0.64

Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Master Williams Barber Shop	281 Boston Ave	Medford	0.15	0.36	0.56
McGrath Wm J Insurance Agcy	53 Adams St	Medford	0.24	0.44	0.58
Medford Housing Authority	4 Walkling Ct	Medford	0.39	0.13	0.62
Mide Technology Corporation	200 Boston Ave	Medford	0.38	0.13	0.60
Mobil Mart Plus	379 Alewife Brook Pkwy	Somerville	0.49	0.31	0.86
Mochi Richard J & Son Electr...	47 Lyman Ave	Medford	0.26	0.28	0.66
Monumental Research Inst	240 Boston Ave	Medford	0.27	0.23	0.69
Moultons Seafood & Lobster M...	178 Winthrop St	Medford	0.33	0.49	0.65
Mvp Liquors	2153 Mystic Valley Pkwy	Medford	0.46	0.04	0.91
N C Electrical Services	184 Winthrop St	Medford	0.35	0.49	0.66
Nanobiosym	200 Boston Ave	Medford	0.38	0.13	0.60
Natural Dent In	196 Boston Ave Ste 3900	Medford	0.40	0.12	0.82
Nelson Group Construction	165 Sharon St	Medford	0.66	0.26	1.06
New Life Baptist Church	320 Boston Ave	Medford	0.04	0.47	0.45
Nolan James R & Joyce T	343 Alewife Brook Pkwy	Somerville	0.47	0.41	0.80
North Street Union Cong Chur...	144 North St	Medford	0.26	0.34	0.64
On Line Sales	240 Boston Ave	Medford	0.27	0.23	0.69
Parlance Corp	200 Boston Ave	Medford	0.38	0.13	0.60
Pasquale Bros Auto Body	364 Boston Ave	Medford	0.10	0.58	0.33
Pasta Pisa	285 Boston Ave	Medford	0.14	0.36	0.56
Phillips David Sculpture Stu...	236 Boston Ave	Medford	0.28	0.22	0.70
Port Mala	66 Clark St	Medford	0.31	0.55	0.58
Pranzis	186 Winthrop St	Medford	0.35	0.49	0.67
Properties Cummings	196 Boston Ave	Medford	0.40	0.12	0.82
Prospect Properties Co Inc	93 West St	Medford	0.36	0.22	0.76
Real Time Innovations	196 Boston Ave	Medford	0.40	0.12	0.82
Rice Robert G PC	196 Boston Ave Ste 2000	Medford	0.40	0.12	0.82
Robert L Oneil CPA	2424 Mystic Valley Pkwy	Medford	0.51	0.49	0.84
Roi Solutions	196 Boston Ave	Medford	0.40	0.12	0.82
Rons Amusements	41 Woods Ave	Somerville	0.36	0.38	0.70

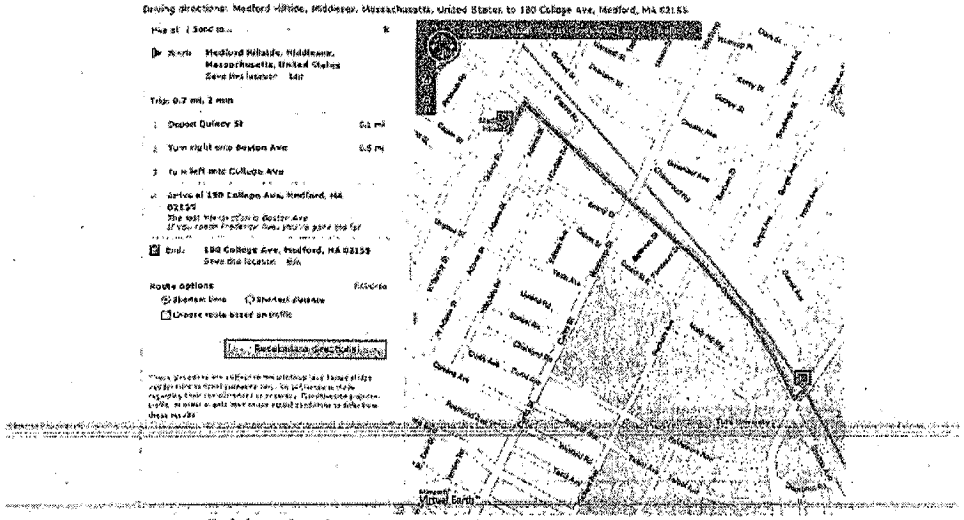
Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Roses Restaurant	321 Boston Ave	Medford	0.05	0.48	0.44
Rowonta	196 Boston Ave	Medford	0.40	0.12	0.82
Sacred Heart Rectory	55 Winthrop St	Medford	0.06	0.53	0.39
Saint Josephs	2520 Mystic Valley Pkwy	Medford	0.56	0.63	0.82
Saint Josephs	2520 Mystic Valley Pkwy	Medford	0.56	0.63	0.82
Sav Mor Liquors	2153 Mystic Valley Pkwy	Medford	0.48	0.04	0.91
Select Rehab	300 Winthrop St	Medford	0.63	0.56	0.95
Serpa Construction	52 Cotting St	Medford	0.29	0.34	0.68
Shafa Physical Therapy Clini...	196 Boston Ave	Medford	0.40	0.12	0.82
Shepherd Realty	248 High St	Medford	0.60	0.46	0.96
Siltari Insurance Agency	315 Boston Ave	Medford	0.06	0.46	0.46
Sleep Healthcenters	200 Boston Ave	Medford	0.38	0.13	0.80
Solutions For Living	200 Boston Ave	Medford	0.38	0.13	0.80
St Josephs Nursery School	2520 Mystic Valley Pkwy	Medford	0.56	0.63	0.82
Starbucks Coffee	2151 Mystic Valley Pkwy	Medford	0.48	0.04	0.91
The Horn Book Inc	24 Gordon St	Somerville	0.35	0.36	0.70
The Laundry Mat	281 Boston Ave	Medford	0.15	0.36	0.56
The Nicolas Call Salon & Spa	243 Boston Ave	Medford	0.27	0.24	0.69
The Tasty Gourmet	321 Boston Ave # B	Medford	0.84	1.00	0.96
This Old Tub & Sink	161 George St	Medford	0.18	0.51	0.49
Tissue Regeneration Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Tony Barones Carpentry	29 Hamilton St	Medford	0.32	0.31	0.70
True Value Hardware	325 Boston Ave	Medford	0.05	0.49	0.43
Tufts University	28 Capen St	Medford	0.14	0.50	0.44
Tufts Variety Store Inc	285 Boston Ave	Medford	0.14	0.36	0.56
U Haul Company	600 Mystic Valley Pkwy	Somerville	0.51	0.07	0.94
Ullas Flowers & Gifts	328 Boston Ave	Medford	0.03	0.49	0.43
Ultimate Barber Shop	328 Boston Ave	Medford	0.03	0.49	0.43
Walnut Hill Properties	15 Capen St	Medford	0.12	0.51	0.43
Waterman Jason	11 Yale Rd	Arlington	0.91	0.61	1.26

Name	Address	City	Distance (miles) to station at Winthrop	MVP	College
Wesley United Methodist Chur...	100 Winthrop St	Medford	0.12	0.46	0.49
Western Union	319 Boston Ave	Medford	0.05	0.47	0.45
Winthrop House Senior Care L...	300 Winthrop St	Medford	0.63	0.56	0.95
Wireless Inc	200 Boston Ave	Medford	0.38	0.13	0.80
Workout World	200 Boston Ave	Medford	0.38	0.13	0.80
Workplace Strategies	15 Chester Ave	Medford	0.13	0.53	0.44
Zion Christian Fellowship	320 Boston Ave	Medford	0.04	0.47	0.45

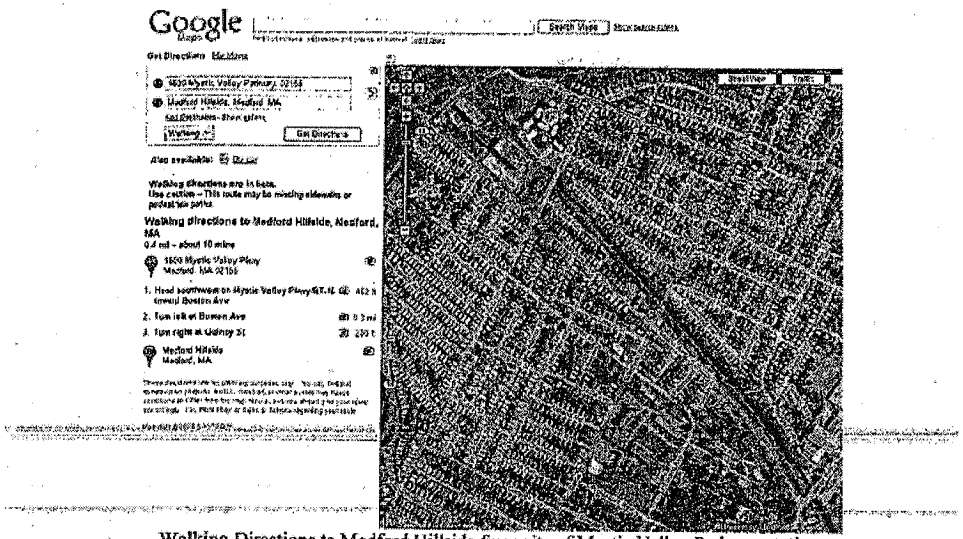
	Distance (miles) to station at Winthrop	MVP	College
Minimum	0.03	0.04	0.33
Average	0.34	0.37	0.71
Maximum	0.91	1.00	1.26



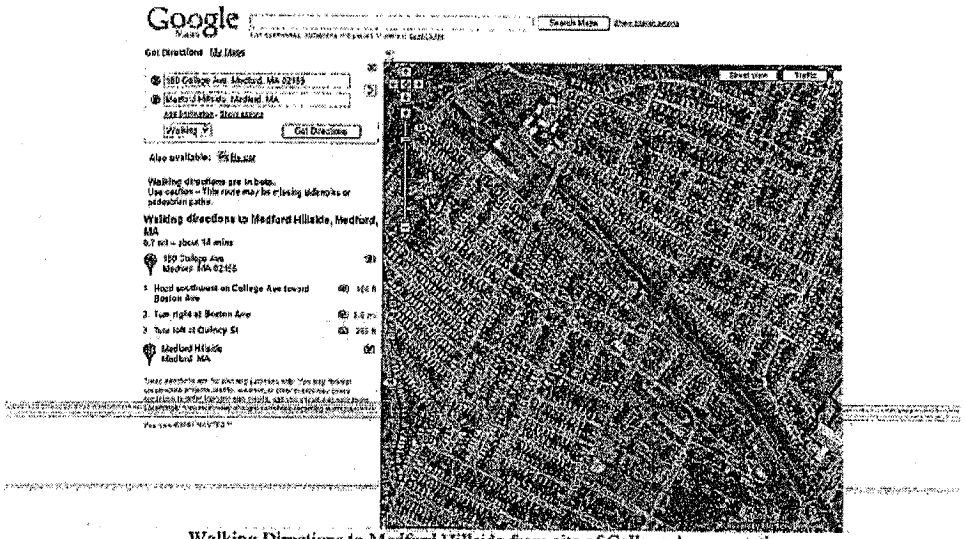
Driving Directions – Medford Hillside to site of Mystic Valley Parkway station
Microsoft Live Search Maps
http://tinyurl.com/6dxa2f
(showing 0.4 mile distance between Hillside and MVP station)



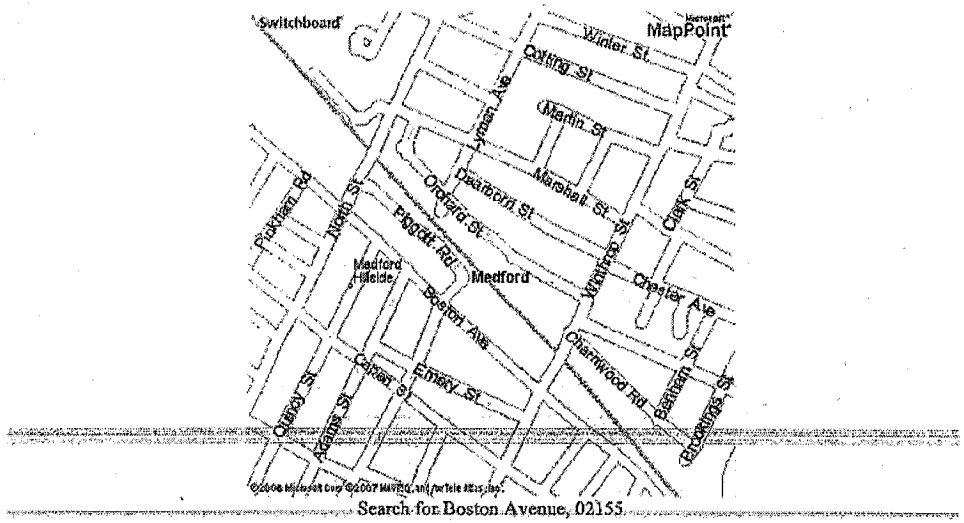
Driving Directions – Medford Hillside to site of College Avenue station
Microsoft Live Search Maps
http://tinyurl.com/5j9bhh
(showing 0.7 mile distance between Hillside and College station)



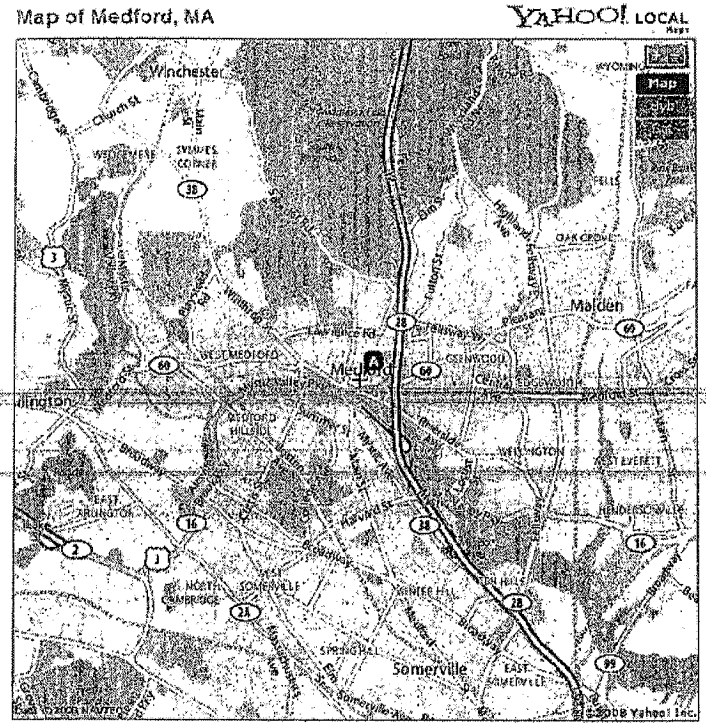
Walking Directions to Medford Hillside from site of Mystic Valley Parkway station
Google Maps
http://tinyurl.com/5cqu4y
(showing 0.4 mile, 10 minute walk from Hillside to MVP station)



Walking Directions to Medford Hillside from site of College Avenue station
Google Maps
http://tinyurl.com/5zmens
(showing 0.7 mile, 14 minute walk from Hillside to College station)



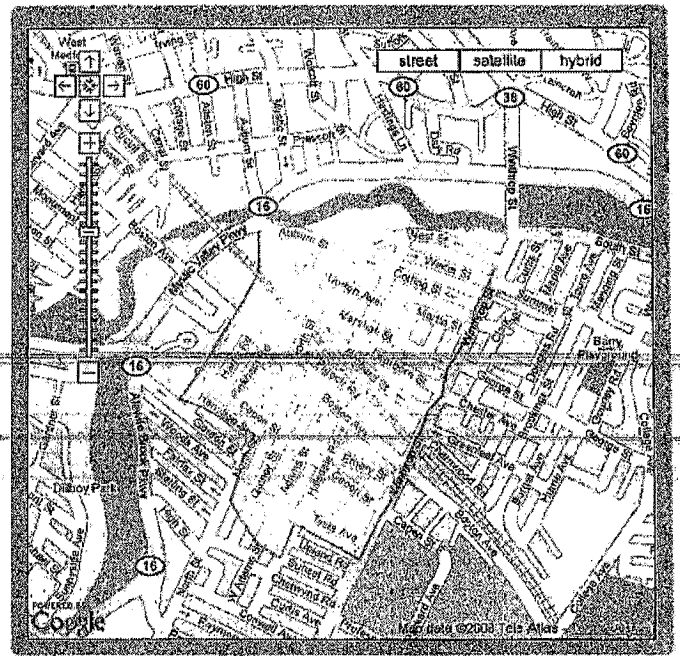
Search for Boston Avenue, 02155
MapsOnUs.com
http://tinyurl.com/55jpf9
(showing Medford Hillside west of Boston Avenue, north of Winthrop Street)



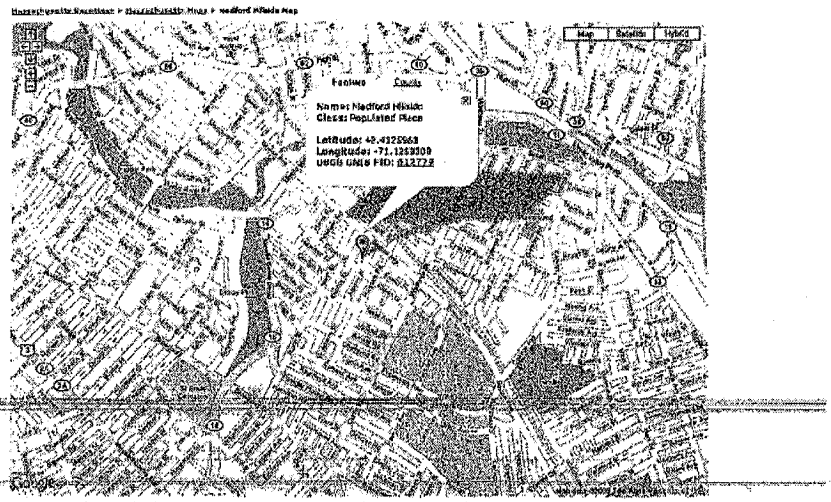
Search for Medford, MA
Yahoo! Local Maps
http://tinyurl.com/672cg3
(showing Medford Hillside on Boston Avenue
between Winthrop Street and Mystic Valley Parkway)

Medford, MA (Medford Hillside)

Found within zip code: 02155



Medford Hillside
http://www.neighborhoodscout.com/ma/medford/medford-hillside/
(showing Medford Hillside bounded by Winthrop Street, Mystic River and Somerville)



Massachusetts Gazetteer > Massachusetts Cities > Medford Hillside, MA (BIG Map)
MA HomeTownLocator
http://massachusetts.hometownlocator.com/MA/Middlesex/Medford-Hillside.cfm
http://tinyurl.com/5u82op
(showing Medford Hillside in first block of Adams Street
southwest of Boston Avenue)

Newspaper References (Articles, Obituaries, Real Estate Transactions, Classified Ads) Locating Medford Hillside

AUSTIN.—In Medford Hillside, George H. Austin, 60 yrs. 9 mos. Funeral Tuesday, at 11 o'clock, from his late residence, 7 Quincy st. Relatives and friends invited. Train leaves Boston via Bos. & Lowell railroad at 10 15.

Nov 19, 1889. p.8
Boston Daily Globe
(indicating that Quincy Street, North of Winthrop Street, is in Medford Hillside)

ATKINS.—In Medford Hillside, Aug. 16, George H. Atkins, 65 yrs. 11 mos. 24 ds. Funeral private at his late residence, Capen st., Sunday, Aug. 17, at 4 o'clock p. m. The remains will be taken to Waterville, Me., for interment.

Aug 19, 1890. p.6
Boston Daily Globe
(indicating that Capen Street, north of Winthrop Street, is in Medford Hillside)

G. Marion Keene has sold for Murray Cheever a large lot of land on Emery st, Medford Hillside, to Elmer E. Bailey. The same dealer has sold for Lewis H. Lovering an estate on Boston av, West Medford, to T. F. Keefe.

Jun 3, 1894. p.10
Boston Daily Globe
(indicating that Emery Street, north of Winthrop Street, is in Medford Hillside)

Mr Leland has also sold for H. M. Helmes a new dwelling house and 5000 feet of land at the corner of Hillside road and Capen st, Medford Hillside, to Wellington O. Sawyer for $4500.

Aug 2, 1896. p.10
Boston Daily Globe
(indicating that Capen Street at Hillside Road, north of Winthrop Street, is in Medford Hillside)

MEDFORD, June 26—Surrounded by children and grandchildren and many guests, Mr and Mrs Charles M. Bradford observed the 50th anniversary of their marriage at their home on Hillsdale road, Medford Hillside, tonight.

Jun 27, 1903. p.3
Boston Daily Globe
(indicating that Hillsdale Road, north of Winthrop Street, is in Medford Hillside)

BAIN—In Medford Hillside, Nov 2, Bernard Bain, 65 yrs 10 mos. Funeral Wednesday at 2 p m, from his late residence, 80 Winthrop st, Medford, Mass.

Nov 3, 1903. p.11
Boston Daily Globe
(indicating that Winthrop Street is in Medford Hillside)
Boston Daily Globe

The estate, 4 Marshall st, Medford Hillside, consisting of a frame house of eight rooms and 5000 square feet of land, has been sold by Margaret E. Roberts to Mabel M. Cross, who buys for a home. The assessed value is $2700, and the price was above this figure. Shepard & Morse, Old South building, were the brokers.

Oct 1, 1905. p.16
Boston Daily Globe
(indicating that Marshall Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD, March 13—Mrs Carrie B. Grant, aged 43, wife of Albert M. Grant, died at her home, 130 Winthrop st, Medford Hillside, this afternoon, after a brief attack of peritonitis.

Mar 14, 1907. p.11
Boston Daily Globe
(indicating that Winthrop Street is in Medford Hillside)

Hillside runs from the Mystic River in the north to Tufts University in the south. East to west, the neighborhood extends from College Avenue in the east to the Somerville line in the west.

Sep 2, 2005. p.043
Boston Herald
(describing Tufts University as the southern boundary of Medford Hillside)

With his clear path to a second term, Sciortino is working on a list of bills he plans to file next January, with topics ranging from education funding, consumer protection, and civil rights.

Meanwhile, Sciortino, who bought a home in the Medford Hillside neighborhood, said he is enjoying his new home city.

"I love it. I love the neighborhood. There's a lot of local shops here. It's walk-able to public transportation, and there are good neighbors."

Oct 12, 2006, p.GNW.1
Boston Daily Globe
(indicating that Orchard Street, Sciortino's home, is in Medford Hillside)

MEDFORD, Dec 15—Miss Catherine C. Leary, aged 31, daughter of Mr and Mrs Daniel Leary of 271 Boston av, Medford Hillside, and sister of Albert Leary of Arlington, Georgetown and Medford High football star, and of William Leary, former captain of the Medford High football team and a member of the Holy Cross football team, died at her parents' residence today, after several months' illness.

Dec 16, 1925. p. A10
Boston Daily Globe
(indicating that 271 Boston Avenue, between Winthrop and North Streets, is in Medford Hillside)

MEDFORD, Dec 8—Funeral services for Miss Gertrude J. Kelley, 18, daughter of Mr and Mrs Walter H. Kelley of 16 North st, Medford Hillside, and formerly a pupil at the Center Junior High School, were held today at St Raphael's Church, West Medford.

Dec 8, 1925. p. A2
Boston Daily Globe
(indicating that North Street is in Medford Hillside)

MEDFORD, Dec 5—Funeral services for Mrs Melon Cotting, 53, wife of Edward W. Cotting of 39 Hume av, Medford Hillside, who died yesterday at the Brooks Hospital, Brookline, will take place at 2 tomorrow afternoon at St Joseph's Church.

Dec 5, 1925. p. A4
Boston Daily Globe
(indicating that Hume Avenue is in Medford Hillside)

The registrars of voters announced today that registration for the special election on Nov 17, to fill the vacancy in the Board of Aldermen, caused by the resignation of Alderman E. C. Blake of Ward 4, will begin Monday, Oct 19, and will end at 10 p m on Oct 29. Registration will take place at the office of City Clerk Winslow during office hours. Evening sessions will be held by the registrars on Oct 22, 26 and 28 from 7:30 to 9 at the Medford Building, and on Oct 23 at the Medford Hillside Ward 4 polling place, corner Greenleaf av and Winthrop st.

Oct 7, 1925. p. 6A
Boston Daily Globe
(indicating that Greenleaf Avenue and Winthrop Street is in Medford Hillside)

MEDFORD, Oct 23—Funeral services for Henry V. Rowell, aged 84, a retired business man, who was the first New England manager for the Remington Typewriter Company, will be held at 2 o'clock tomorrow afternoon at his late residence, 55 Quincy st, Medford Hillside, where he died yesterday after several months' illness.

Oct 23, 1925. p. A10
Boston Daily Globe
(indicating that Quincy Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD HILLSIDE—5 rooms, lower apartment, all improvements, hardwood floors, steam heat, on direct car line; reasonable rent, adults preferred. Address 170 Boston av., Medford Hillside, Mass. WFSu* n18

Nov 18, 1925. p. A30
Boston Daily Globe
(indicating that 170 Boston Avenue, north of North Street, is in Medford Hillside)

A DANDY TENEMENT, $40; another, $38; 5 rooms, electricity; handy location; all improvements. 8 Mason st., Medford Hillside, off Marshall st., near Winthrop st. 24* n17

Nov 18, 1925. p. 30
Boston Daily Globe
(indicating that Mason Street, north of Winthrop Street, is in Medford Hillside)

McCARTHY—In Medford Hillside, Sept. 27, Owen E., husband of Elizabeth A. McCarthy. Funeral from his late residence, 69 Quincy st., Wed., Sept. 30, at 8:15. Solemn high mass at St. Raphael's Church at 9 o'clock. Relatives and friends invited. Norwood, N. Y., papers please copy.

Sep 29, 1925. p. 24
Boston Daily Globe
(indicating that Quincy Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD, Dec 2—The body of the man found dead and badly mangled at 6 o'clock this morning on the outward-bound tracks of the Boston & Maine Road, between Tufts College and the Medford Hillside Stations, was identified by his parents tonight as Albert W. Stewart, of 13 Fairmount st, Medford Hillside.

Dec 3, 1913. p. 18
Boston Daily Globe
(indicating that 13 Fairmount Street is in Medford Hillside)

WEST MEDFORD, July 27—Enough rocks to have seriously disabled a number of electric cars were found on both tracks of the Medford Hillside and Tufts College line into this evening, but they were all removed before any damage was done. They are supposed to have represented the work of mischievous boys

Jul 28, 1912. p. 9
Boston Daily Globe
(representing Tufts College and Medford Hillside as distinct places)

At the Somerville Hospital it was said that he would recover. In his pocket was found a note written in pencil saying, "In case of death notify my mother, Mrs. H. B. Wood, 118 Capen st, Medford Hillside."

May 26, 1925. p. 9
Boston Daily Globe
(indicating that Capen Street, north of Winthrop Street, is in Medford Hillside)

Announcement is made of the engagement of Miss Alberta Louise Libby, daughter of Mrs Fannie Libby of 39 Brookings st, Medford Hillside, to Earle L. Hadley of 115 Massachusetts av, East Lexington.

May 27, 1925. p. A11
Boston Daily Globe
(indicating that Brookings Street is in Medford Hillside)

MEDFORD HILLSIDE
NEAR TUFTS COLLEGE
FOR RENT, 5 beautiful rooms and bath, all modern conveniences. No. 52 Tesla av., Medford Hillside. Evenings tel. East Boston 1037-W."

Jun 3, 1925. p. 24
Boston Daily Globe
(indicating that Tesla Avenue, north of Winthrop Street, is in Medford Hillside)

BENJAMIN NELSON, 42, of 29 Harris rd, Medford Hillside, overcome at Auburn st and Mystic Valley Parkway. Treated at Lawrence Hospital and sent home.

Jun 6, 1925. p. 10
Boston Daily Globe
(indicating that Harris Road, between North Street and Mystic Valley Parkway, is in Medford Hillside)

Mrs. Elizabeth Needham Buswell,
5 Peterboro St., Boston, Mass;
Mary L. Castellon, 60 Marshall St.,
Medford Hillside, Mass.
Mrs. Frank E. Chapman,
Shelburne Falls, Mass.

Jun 9, 1925. p. A19
Boston Daily Globe
(indicating that Marshall Street, between Winthrop and North Streets, is in Medford Hillside)

MEDFORD, Jan 25—Miss Ruth L. Griggs, daughter of Mrs F. G. Griggs of 9 Taylor st, Medford Hillside, and George Albert Pirkey, machinist's mate, first class, U. S. S. America, son of Mr and Mrs James C. Pirkey of Newark, N J, were married tonight by Rev Clarence E. Skinner at the latter's home, 102 Powder House boulevard, Somerville. Miss Esther Ford of Medford was bridesmaid. Chief Machinist's Mate George A. Thurlow of the America was best man.

Jan 26, 1919. p. 6

Boston Daily Globe

(indicating that Taylor Street, between Winthrop and North Streets, is in Medford Hillside)



Frederick W. McGowan.

MEDFORD, Feb 1—Frederick W McGowan of 144 Winthrop st, Medford Hillside, former secretary of the Hillside Men's Club and of the Board of Trade and a well-known Medford and Boston attorney, has just arrived home from a short trip to Maine, following his return from France on the steamship La Lorraine. Mr McGowan is recuperating from nine months' work with the American Red Cross in the hospital and supply zone areas of France.

Feb 2, 1919. p. 16

Boston Daily Globe

(indicating that Winthrop Street is in Medford Hillside)

Col Logan requested all former officers of the 1st Battalion to communicate with Maj Gray, 41 Quincy st, Medford Hillside; of the 2d Battalion with Maj T. F. Foley, 84 Lowell st, Worcester, and of the 3d Battalion with Maj Hanson, 25 Boynton st, Waltham.

Sep 16, 1919. p. 18

Boston Daily Globe

(indicating that Quincy Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD, Nov 10—Charles H. MacNear, a widely-known resident of Medford Hillside, father of Alderman Harry M. MacNear, died suddenly today at Mechanics Falls, Me, from acute indigestion.

Mr MacNear formerly lived in Winchester where he served for a short time as a police officer. He worked at the Charlestown Navy Yard for many years. He was a member of the Grand Army. For some time he had lived at 30 Orchard st. He is survived by four sons and two sisters.

Nov 11, 1919, p. 8

Boston Daily Globe

(indicating that Orchard Street, between Winthrop and North Streets, is in Medford Hillside)

MEDFORD, Feb 12—The seventh annual "Bingville Dance" of the residents of the Hillside district was held tonight at the Hillside Men's Clubhouse hall, Winthrop st. More than 150 persons, the majority of them in farmer costume, were present. The dance is held annually as a preliminary to the fair of the Hillside Universalist Church, which opens next Friday, for the benefit of the church debt fund.

Feb 13, 1916, p. 3

Boston Daily Globe

(locating the Hillside Men's Clubhouse hall at Winthrop Street)

MEDFORD, Aug 25—Earle H. MacLeod, principal of the Howard High School, Carver, and son of Mr and Mrs Osbourne MacLeod of 22 Whitney st, Cliftondale, was married at 7:30 o'clock tonight to Miss Mildred Wright Sproul, daughter of Mr and Mrs Augustus C. Sproul of 25 Capen st, Medford Hillside, and only other teacher at the Howard High School.

Aug 26, 1923, p. 16

Boston Daily Globe

(indicating that Capen Street, north of Winthrop Street, is in Medford Hillside)

MEDFORD HILLSIDE

HIGH elevation, six rooms, upper flat, steam heater, tiled bath, front and back piazzas, covered hardwood floors, new house, adults preferred, rent $55. 10 Tesla av.; phone Mystic 1183-J.

Sep 2, 1923. p. 39
Boston Daily Globe
(indicating that Tesla Avenue, west of Winthrop Street, is in Medford Hillside)

MEDFORD HILLSIDE

4-ROOM SUITES, improvements, $40-$45-$48. 163 Sharon st.

Dec 9, 1925. p. 34
Boston Daily Globe
(indicating that Sharon Street, well north of North Street, is in Medford Hillside)

MEDFORD HILLSIDE—$38 to small family, 5 rooms, electricity, open plumbing, hardwood floors, refinished. 8 Mason st., 10-2, 4t* fr29

Jul 30, 1925. p. A22
Boston Daily Globe
(indicating that Mason Street, north of Winthrop, is in Medford Hillside)

COLLEGE STUDENTS' rooming house of 9 rooms; adjacent to Tufts College, sacrificed by young widow; $1200 cash, balance easy terms. Apply 11 Fairmount st., Medford Hillside.

Jul 17, 1925. p. A16
Boston Daily Globe
(indicating that Fairmount Street is in Medford Hillside)

Funeral services will be conducted from Gaffey Memorial Funeral Home, 43 High st., Medford, at 8 a.m. Monday. A funeral Mass will follow at 10 in Sacred Heart Church, Medford Hillside. Interment will be in Oak Grove Cemetery.

Oct 18, 1980. pg. 1
Boston Daily Globe
(indicating that Sacred Heart Church, which was on Winthrop Street, is in Medford Hillside)

A funeral Mass will be said at 10 a.m. Monday in Sacred Heart Church, Medford Hillside, for Francis B. Greelish, founder of the New England Assn. of Independent Tire Dealers. He died Wednesday in Kenoza Nursing Home here after a long illness. He was 77.

Feb 6, 1982. p. 1
Boston Daily Globe
(indicating that Sacred Heart Church, which was on Winthrop Street, is in Medford Hillside)

Notes:

The bulk of the newspaper clippings were from ProQuest searches conducted through the Boston Public Library. The searches variously included The Boston Globe and The Boston Herald plus other Massachusetts newspapers. Nearly 800 articles were culled down to thirty-seven that mentioned other streets in the neighborhood. They comprised news articles, real estate transaction records, obituaries, wedding announcements, public process announcements and classified advertisements. The following streets were mentioned:

Number of mentions	Street Name	Notes
7	Winthrop Street	
4	Quincy Street	North of Winthrop Street, closer to North Street
4	Capen Street	North of Winthrop Street
2	Emery Street	North of Winthrop Street
2	Marshall Street	North of Winthrop Street
2	Orchard Street	North of Winthrop Street
2	Boston Avenue	Both addresses north of Winthrop Street
2	Mason Street	North of Winthrop Street
2	Fairmount Street	Closer to Winthrop Street than College Avenue
2	Tesla Avenue	North of Winthrop Street
1	Hillsdale Road	North of Winthrop Street
1	North Street	North of Winthrop Street
1	Harris Road	North of North Street
1	Taylor Street	North of Winthrop Street
1	Sharon Street	North of North Street
1	Greenleaf Avenue	At the corner of Winthrop Street
1	Brookings Street	South of Winthrop Street
1	Hume Avenue	South of Winthrop Street
1	College Avenue	South of Winthrop Street

From: 01/08/2010 09:56 #011 P.001

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-105-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-105-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Signature

Harwa ElSabbahy
Print Name

169 Monsignor O'Brien Hwy. Apt. 206
Address

Johnson, Holly (EEA)

From: El-Wadi, Elias [Elias.El-Wadi@analog.com]
Sent: Friday, January 08, 2010 4:42 PM
To: Holly.S.Johnson@state.ma.us
Subject: Comments on Green Line Extension - Lechmere Relocation

Dear Secretary Bowls,

As a resident of the glass factory condominiums, I am very concerned about the design and location of the new Lechmere station.
I understand this is a part of a major project, the green line extension and I appreciate all the effort going on but I urge you to consider all these people negatively affected. I would like to stress on how much damage the current design will have on our community and our quality of life.

I-106-001 Having the train station tracks so close to our building is by virtue dangerous and not healthy to us and our children. Please consider not using the existing tracks but moving them as far away from the rear of the glass factory building and at least 200 feet away.
We are very proud of our green space and we took very good care of it for many years so we urge you to preserve it and grow it to provide a visual barrier between our building and the new station.

I-106-002 Also, I understand the land capacity constraints you are facing for the maintenance facility but this is not the last stop and there should not be any facilities on this land. I am sure you are aware of how valuable this land is and how much it would be beneficial for our society to use it appropriately and build something like a park. Whatever it is, please keep in mind the people vision of this potential development area.

I-106-003 Please review the bus lines and their route as these will add to the noise and traffic that is going to severely affect us.
I only ask you to remember that this building exists and there are 104 units with families living in them so don't build around us, take us into consideration and look for our interest. Other alternatives may be costly but this is a once in a lifetime project so let's build the next Lechmere Square and have it improve our community in Cambridge rather than pose stress and safety threats.

Thank you for hearing us and good luck.
Sincerely,
Elias El-Wadi
160 Monsignor Obrien Hwy, Unit 301, Cambridge MA 02141

I-106-001

Revised conceptual plans for Lechmere Station and connecting track structures are included in FEIR Chapter 5, Lechmere Station. These plans will be further refined in the preliminary engineering stage of the Project. Impacts to trees, landscaping, and the visual environment on or near the Glass Factory Condominium property will also be addressed during preliminary engineering. In accordance with the Secretary's Certificate on the DEIR, the FEIR includes only conceptual station designs and station design criteria. The Public Involvement Plan, Chapter 6 of the FEIR, proposes a structure for community involvement throughout the station and trackway design process.

I-106-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-106-003

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA to evaluate opportunities to improve connections between existing bus routes and proposed stations. Specifically at Lechmere Station bus operations have been accounted for and evaluated for their impacts on traffic and noise.The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

Johnson, Holly (EEA)

From: Alex Epstein [alexepstein@gmail.com]
Sent: Thursday, January 07, 2010 2:03 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension DEIR (EEA #13886) public comment
Attachments: Green Line DEIR comments -- AE.pdf

Dear Holly Johnson,

Thank you very much for the opportunity to submit my public comments on the Green Line Extension DEIR. I have attached my detailed letter in PDF format for the Secretary's consideration.

Sincerely,
Alex Epstein
278 Beacon Street
Somerville, MA 02143

January 6, 2010

Secretary Ian A. Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Ms. Holly Johnson, MFPA Analyst
EEA No. 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

I strongly support the construction of the Green Line Extension to Route 16 and to Union Square and believe its positive environmental impacts dwarf potential negative impacts. I would like to offer my sincere thanks to MassDOT for committing to a Route 16 terminus, to full design of the Community Path, and to continued analysis of alternative locations for the maintenance and storage facility. The DEIR represents a critical milestone in the public evaluation process and I appreciate the opportunity to comment on MassDOT's work thus far.

However, I do believe that major design and planning improvements must be included in the final EIR to yield a first-class transit system, as well as to support robust economic development and improved quality of life for Cambridge, Somerville, and Medford residents. Therefore I think it is critical that the following issues be incorporated as requirements in the MEPA Certificate:

Station Design & Siting

I-107-001

- Green Line stations must connect as seamlessly as possible with all other clean modes of transportation, including current and re-routed buses. Station designs should accommodate bus drop off and pick-up (for example, using bus pull-out pockets or curb extensions), provide bus shelters for all travel directions, and include maximum integration of transit modes. Re-routed bus lines connecting to Green Line stations should be implemented simultaneously with the start of Green Line service, as was done for the Red Line northwest extension.

I-107-002

- Station designs should only allow for minimal car drop-offs ("kiss-and-ride") where necessary, but not parking, and should prioritize ease of pedestrian and bicycle access over car access. Any "kiss-and-rides" should not cut off the sidewalk to pedestrians as is shown at Brickbottom and Route 16; a drop-off zone on the street would be more appropriate.

I-107-003

- Pedestrian and neighborhood access should be maximized by locating station headhouses on major streets whenever possible, with station access from both sides of the street and in all directions of travel—especially at Broadway, College Avenue, and Lowell Street stations. A second headhouse should be considered on School Street for access to the west end of Gilman Square Station; also direct station access to the Somerville High School/Library/City Hall complex would be beneficial. To provide direct pedestrian access to Union Square from Union Square Station and higher station visibility, please consider building a 100-foot connecting street-level pedestrian promenade or plaza between Webster Street and Prospect Street (opposite the proposed headhouse) over the Fitchburg railroad right of way. At all stations, sidewalks leading to headhouses should be widened and additional crosswalks considered near stations; traffic calming measures such as curb extensions and raised crosswalks or tables should be considered where possible. This will maximize transit use.

I-107-004

I-107-001

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-107-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. The only Green Line Extension station that will provide parking is Lechmere Station. Drop-off and pick-up areas will be provided at at several stations. These will accommodate expected kiss-and-ride activity.Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-107-003

Stations have been designed to meet MBTA design standards and to be ADA-compliant in regard to access. The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-107-005

- MassDOT should reconsider station designs to maximize ease of access where riders will access stations at bridge crossings. For example, Brickbottom Station should be shifted to abut Washington Street for direct high-visibility access from Washington. Pedestrian and bus access to stations and high station visibility from major streets should be prioritized for maximum convenience.

I-107-006

- Stations should provide adequate bicycle storage. This should be calculated based on a percentage of 3 to 5% of boardings at the stations, as is done on the Red Line, e.g., at Alewife and Davis. Route 16, Lowell Street, and Union Square stations will have direct bicycle access from the Community Path and should therefore have bike parking based on 5% of ridership; all other stations should be allotted 3% ridership bike parking. Bicycle storage should be sheltered from the elements if at all possible to enable all-weather bike access, and it should be installed in easy-to-locate, well-lit and safe locations. Way-finding signage should be provided if bike parking is not immediately obvious to arriving bicyclists. Excellent bike access and parking is important for improving connectivity to the Green Line Stations and is cost-effective for increasing ridership.
    - Note that the Federal Transit Administration has issued a proposed change to bicycle/pedestrian access to public transportation: "all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation." Federal Register: November 13, 2009 (Volume 74, Number 218), http://edocket.access.gpo.gov/2009/E9-27240.htm.

I-107-007

- More attention should be given to bicycle access to and from the stations. MassDOT should work directly with the Cities of Somerville, Medford, Cambridge and DCR to plan and install bike lanes, sharrows, and other facilities that connect directly to the stations.

I-107-008

- The new Green Line stations should not include escalators, which are expensive to install and maintain. Wide staircases and ADA elevator access are sufficient. Reallocate the escalator budget for other needed station elements recommended in this letter, such as bike shelters and additional headhouses.

I-107-009

- Takings of private land for stations should be minimized to save the state money and reduce construction delays. This particularly applies to the Route 16 Station.

I-107-010

- Designs for the relocated Lechmere Station should be based on or incorporate the East Cambridge Planning Team (ECPT) pedestrian-friendly station proposal and old Lechmere Station re-use suggestions. The terminus at Route 16 should be based on the Medford Green Line Neighbors Alliance (MGNA) well-reasoned design concept for minimizing takings.

Community Path Integration

I-107-011

- The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations. The final EIR should clearly state that the extension of the Somerville Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the former EOT.

- For obvious cost efficiencies, the Green Line and Community Path extensions should be constructed as one project and clearly described as such by MassDOT in their project documents. The Community Path will provide cost-effective off-road bicycle and pedestrian access to the stations,

I-107-004

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-107-005

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Stations have been designed to meet MBTA design standards and to be ADA-compliant in regard to access. The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-107-006

Bicycle storage at each station was evaluated based on ridership projections developed by CTPS. DEIR/EA Appendix D includes methods

I-107-011

offering superior neighborhood connectivity (like in Davis Square where 60% of the residents use public transportation and thousands walk and bike to the station each day). More riders means a greater chance of getting New Starts funding.

I-107-012

- MassDOT should commit to work with the City of Somerville and State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line, as well as other examples in Los Angeles and DC), including applying for Federal New Starts funding for allowed bicycle and pedestrian access costs (see note above on FTA proposed bike/ped eligibility).

I-107-013

- Community Path access at Lowell Street in particular should be redesigned for direct bicycle access to the station. The design as proposed requires large vertical and horizontal detours and a road crossing for Community Path users going to the station. Consider a bike/pedestrian grade crossing to access the platform from the Path.

I-107-014

- The Community Path route should connect the Washington St./Brickbottom station, the Brickbottom community and Inner Belt to Lechmere. The present plans do not make these connections. If the proposed Yard 8 location for maintenance and storage facility is "dropped", better routes for the Community Path (such as along the Green Line to Brickbottom and over the former Red Bridge location) that do make these connections are possible. The Green Line extension plans should state that this re-evaluation will be done.

Preservation of Corridor Transit Potential: Beyond Union Square and Route 16, Plus Infilling

I-107-015

- Track design and construction should enable adding future stations – between Lechmere and Washington Street / Union Square, between College Avenue and Route 16, and along a future Green Line extension to Porter Square that would serve dense, transit-deprived Cambridge and Somerville neighborhoods. Potential extension to West Medford, as once planned, should also be made possible by the design of the Route 16 terminus.

Route 16 Construction and Connections

I-107-016

- The Medford extension should be designed and constructed to Route 16 as one project, not in two phases (the first phase stopping at College Ave), for the following reasons: building in two phases is not a cost-effective way to construct this transit system; the shortened system will attract far fewer riders; and this strategy increases the chance that the Green Line is never extended to Route 16.

I-107-017

- The plans should show how riders will safely access the Route 16 terminus station from the Alewife Brook paths that are being improved as a $3.6 million ARRA stimulus project. (The current plans in the DEIR do not show this.) Safe routes for pedestrians and bicyclists should be shown from the west side of Route 16.

- A multi-use path should also be designed and constructed together with the Green Line Extension project that will run from the Route 16 Station to the West Medford Commuter Rail Station. This is a 1,900-foot distance that is easily walkable in 5-10 minutes if there is a direct connection between the two stations; it will allow for commuter rail- Green Line transfers, boosting the ridership of both transit lines, even if a Green Line extension to West Medford (still preferable) cannot be built.

Economic Development & Regional Corridor Planning

used to analyze demand for bicycle parking at each Project station. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-107-007

Where appropriate, MassDOT will work with the local municipalities to evaluate bicycle access opportunities at stations.

I-107-008

Stations have been designed to meet MBTA design standards and to be ADA-compliant in regard to access. The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-107-009

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-107-010

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans will be further refined in the preliminary engineering stage of the Project. In accordance with the Secretary's Certificate on the DEIR, the FEIR includes only conceptual station designs and station design criteria. Designs for each station and the Green Line Extension alignment will be refined during the Project's

I-107-018

- Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a human-scale, pedestrian-friendly surface boulevard that invites pedestrian and bicyclist use. Improved connectivity between both sides of Route 28 is crucial for economic development, walkable station access, and improved quality of life.

I-107-019

- State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts.

I-107-020

- The design and siting of the maintenance facility should not prevent development of a street grid in Inner Belt/Brick Bottom that enables access from North Point, McGrath-O'Brien Highway and Washington St.

System-wide Accessibility

I-107-021

- System-wide accessibility should be a goal of the MBTA Green Line. To accomplish this the MBTA should strongly consider building the Green Line Extension stations with high-level platforms that are 14" above the rail, allowing level entry onto low-floor Type 8 and Type 9 LRVs. At the same time, it would be necessary to (1) replace all the existing bi-fold Green Line car doors with bi-parting plug doors that are compatible with level entry; (2) raise all other station platforms in the Green Line system to 14" height over a phase-in period of several years; (3) and follow through with ordering bi-parting plug doors in the new Type 9 rolling stock, as I understand is already planned. This systemwide change would eliminate the need for time-consuming bridge plates and mobile lifts, while speeding up all passenger boarding.
    - Once sliding doors are retrofitted on all Type 7 and 8 cars and ordered with Type 9 cars, operators would continue to use low-floor cars' bridge plates at partly raised platforms (e.g., Park and Arlington) and the mobile lifts at low-level platforms (e.g., Hynes Center and surface branches) that have not yet been upgraded. As all stations are upgraded over some number of years, bridge plates and lifts would no longer be necessary for wheelchair access at those stations. The phase-in of level boarding could be handled the same way that bridge plates are currently being phased in over lifts for partly "raised" platforms. Subway maps and the MBTA website would indicate which stations have become level boarding, where wheelchair customers do not need to request assistance. The Green Line Extension is the largest change to the Green Line system since Riverside and combined with the future Type 9 orders presents the best chance to achieve universal accessibility and improved boarding efficiency across the system.
    - Note that the U.S. Access Board specifies the maximum step height for level-entry LRVs as 5/8" inch for new-construction platforms and 1.5" for existing platforms. http://www.access-board.gov/transit/manuals/transit%20manual%20-%20d.htm Therefore the existing bi-fold doors prevent level entry because of more than 5/8" car sway during boarding, and they should be retrofitted across the system with sliding plug doors.

Maintenance Facility & Regional Environmental Justice

I-107-022

- More detailed analysis of Option L and particularly "Mirror L BET" (described by Alan Moore in his public comment letter) is necessary. The siting of the maintenance facility and storage yards should

preliminary engineering stage. The Public Involvement Plan, Chapter 6 of the FEIR, proposes a structure for community involvement throughout the design process for each station.

The contractor that secures the Green Line Extension construction contract will be expected to prepare the existing Lechmere Station site for future redevelopment.

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. In the interim, MassDOT proposes a community planning process for the area of a future Mystic Valley Parkway/Route 16 station to cover issues relating to station design and layout, neighborhood impacts, attendant economic development, and other area planning issues.

I-107-011

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-107-012

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-107-022 not increase the transportation infrastructure and environmental burdens in Somerville or interfere with proposed economic development in the Brickbottom Inner Belt area.

I-107-023 • Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston should either be phased out and a new facility built south of Boston, or the urban core passenger rail should be electrified with dual-mode locomotives, to eliminate the pollution from shuttling of trains through Cambridge.

FEIR versus Supplemental EIR

To avoid the significant delay that a separate FEIR would entail, I believe the most critical issues with the DEIR should either be addressed in a Supplemental EIR, or in Addenda to the FEIR. These issues include:

I-107-024 ▪ Eliminate the Yard 8 Option for the Maintenance Facility and require a full analysis of Scheme L and "Mirror L BET" designs.

I-107-025 ▪ Commit to a collaborative public process for the next phase that would provide oversight and station area participation and develop a process for addressing mitigation concerns.

I-107-026 ▪ Fully integrate the Community Path into the design, planning, construction, and funding of the Green Line extension.

I-107-027 ▪ Coordinate the Green Line extension with calming of the McGrath/O'Brien Highway to a surface boulevard in Cambridge & Somerville.

I-107-028 ▪ Design and construct the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project.

I-107-029 ▪ Prioritize pedestrian and bicyclist access over motor vehicle access in the new station designs.

Thank you for taking the time to consider these important improvements to the Green Line Extension project plans. Please don't hesitate to contact me for more information at (917) 239-8785 or alexepstein@gmail.com.

Sincerely,

Alexander Epstein

278 Beacon Street

Somerville, MA 02143

I-107-013

For safety reasons, the MBTA, the future owner and operator of the Green Line Extension, has required that this portion of the Green Line be entirely separated from vehicular, pedestrian, and bicycle traffic. This separation would not allow at-grade track crossings for pedestrians and/or bicyclists at any point. Plans for Lowell Station and the Community Path connection will be further refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the design process for stations, trackways, and the Community Path.

I-107-014

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-107-015

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and

infrastructure design with conceptual future Green Line additions and extensions.

I-107-016

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-107-017

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout and access at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-107-018

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to

ensure, to the extent feasible, consistency with planning and other projects.

I-107-019

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality. However, reconstruction of Route 28 is not part of the Green Line Extension Project.

I-107-020

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-107-021

The Green Line Extension Project is being designed for fully accessible stations in compliance with ADA requirements. However, the issue of systemwide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this Project.

I-107-022

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real

estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-107-023

The Boston Engine Terminal (BET), its operations, and general commuter rail operations and maintenance are beyond the scope of the Green Line Extension project. The conceptual future electrification of MBTA commuter rail lines in the Study Area is also beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail.

I-107-024

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility

alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-107-025

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-107-026

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-107-027

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor

initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-107-028

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-107-029

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary’s Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary

engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

From: 01/07/2010 22:03 #009 P.001

Lourdes Esparragoza
169 Monsignor O'Brien Hwy #702
Cambridge, MA 02141

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-108-001 I As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus

I-108-001

Please see Comment Letter I-013.

traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Ian Bowles,

I'm writing this letter with regards to the Draft Environmental Impact Report (DEIR) and in particular the Maintenance Facility and Storage Yard alternatives.

I have lived at Brickbottom for over twelve years and have been a big supporter of the Green Line extension project. Also as an avid cyclist, the prospect of the Community bike path being located so close to Brickbottom is a clear win for us as well.

I-109-001 That said, I'm extremely unhappy with the continued insistence by the DOT that Yard 8 is the best site for the Maintenance and Storage Yard. I know first hand the effects of a maintenance facility, as the Boston Engine Terminal went online shortly after I moved to Brickbottom. Ever have a diesel train engine idle outside your window? I have. In fact, I've had work crews outside my window at 3AM, soot on my windows and in the air I breathe, air horns blown outside my window (even though it's a no-horn zone), with little to no recourse from any of the agencies involved.

I-109-002 I have little faith in the promises from the DOT that folks on the other side of my building (I live on the McGrath Highway side) will be able to live with the noise, vibration and light pollution the siting of Yard 8 will bring to their lives. Asking them to bear this burden is unjust.

I-109-003 I urge you to hear our plea for one of the alternative sites, in particular Mirror H, which is preferred by the City of Somerville. This site, or even Scheme L, will push the facility closer the existing Engine Terminal and away from the only residential buildings in the area, resulting in better quality of life for the 200+ residents of Brickbottom. I also would request that a Citizen Advisory Committee be established to oversee the remainder of the project and ensure that community has a voice in the process.

Regards,

Anthony Espy
1 Fitchburg St. C201
Somerville, MA 02143
617 448-0627
<tonyespy@gmail.com>

Emailed FAXED

I-109-001

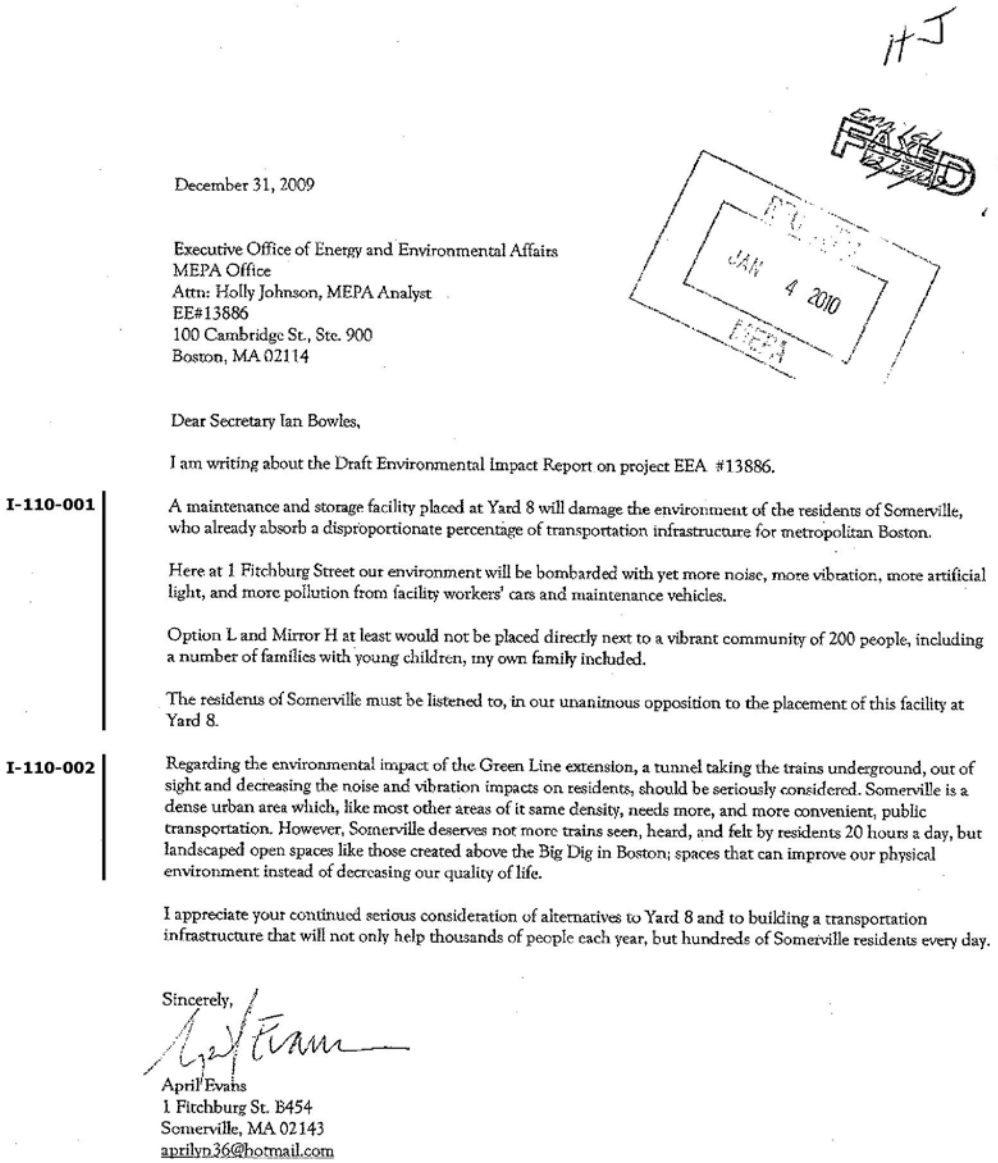
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-109-002

Please see response to Comment I-109-001.

I-109-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



December 31, 2009

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St., Ste. 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing about the Draft Environmental Impact Report on project EEA #13886.

I-110-001 A maintenance and storage facility placed at Yard 8 will damage the environment of the residents of Somerville, who already absorb a disproportionate percentage of transportation infrastructure for metropolitan Boston.

Here at 1 Fitchburg Street our environment will be bombarded with yet more noise, more vibration, more artificial light, and more pollution from facility workers' cars and maintenance vehicles.

Option L and Mirror H at least would not be placed directly next to a vibrant community of 200 people, including a number of families with young children, my own family included.

The residents of Somerville must be listened to, in our unanimous opposition to the placement of this facility at Yard 8.

I-110-002 Regarding the environmental impact of the Green Line extension, a tunnel taking the trains underground, out of sight and decreasing the noise and vibration impacts on residents, should be seriously considered. Somerville is a dense urban area which, like most other areas of it same density, needs more, and more convenient, public transportation. However, Somerville deserves not more trains seen, heard, and felt by residents 20 hours a day, but landscaped open spaces like those created above the Big Dig in Boston; spaces that can improve our physical environment instead of decreasing our quality of life.

I appreciate your continued serious consideration of alternatives to Yard 8 and to building a transportation infrastructure that will not only help thousands of people each year, but hundreds of Somerville residents every day.

Sincerely,

April Evans
1 Fitchburg St. B454
Somerville, MA 02143
aprilyn36@hotmail.com

I-110-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-110-002

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

FAXED

Phyllis Ewen
1 Fitchburg Street #C103, Somerville MA 02143 (617) 669-3907

The Executive Office of Energy and Environmental Affrirs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA#13886
100 Cambridge Street, Suite 900
Boston MA 02114

Dear Secretary Ian Bowls:

I-111-001 I am an artist with a studio at the Brickbottom Artists Building in Somerville and am writing in regard to the Draft Environmental Impact Report on project No. EEA#13886. The detailed evaluation of alternative sites for the Green Line maintenance facility and train storage yard has shown three options. Of the three proposed sites, Mirror H. is the most preferable. This is the preferred site of the City of Somerville and the residents of the Brickbottom Artists Building. Option L will need further study and refinement, but might work.

I-111-002 I strongly oppose siting the Green Line Train Storage Yard and Maintenance Facility in Yard 8. Yard 8, is immediately adjacent to the Brickbottom Building and would have serious negative effects on our quality of life. I am particularly concerned about the noise and vibration levels as it impacts our building and surrounding businesses

In addition to noise and vibration concerns, the Yard 8 location would build a barrier between the Inner Belt and the Brickbottom areas and would impact the potential for future development in the region. The Storage Yard and Maintenance Facility would have a direct impact on future tax revenue as it impacts adjacent property value and future growth.

I support the Green Line Extension and hope to see continued community involvement as plans proceed. In this spirit, I am voicing my strong objections to the Yard 8 site for the Storage Yard and Maintenance Facility. Brickbottom is a diverse community of 220 residents and many who work in the building. The Yard 8 location would unjustly punish us and does not live up to the standards that Mass DOT has promised to deliver.

Thank you for your continued consideration of the alternative sites Mirror H and Option L.

Yours truly,

Phyllis Ewen, C103

I-111-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-111-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

#5

January 04, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-112-001

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state,

I-112-001

Please see Comment Letter I-002.

and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

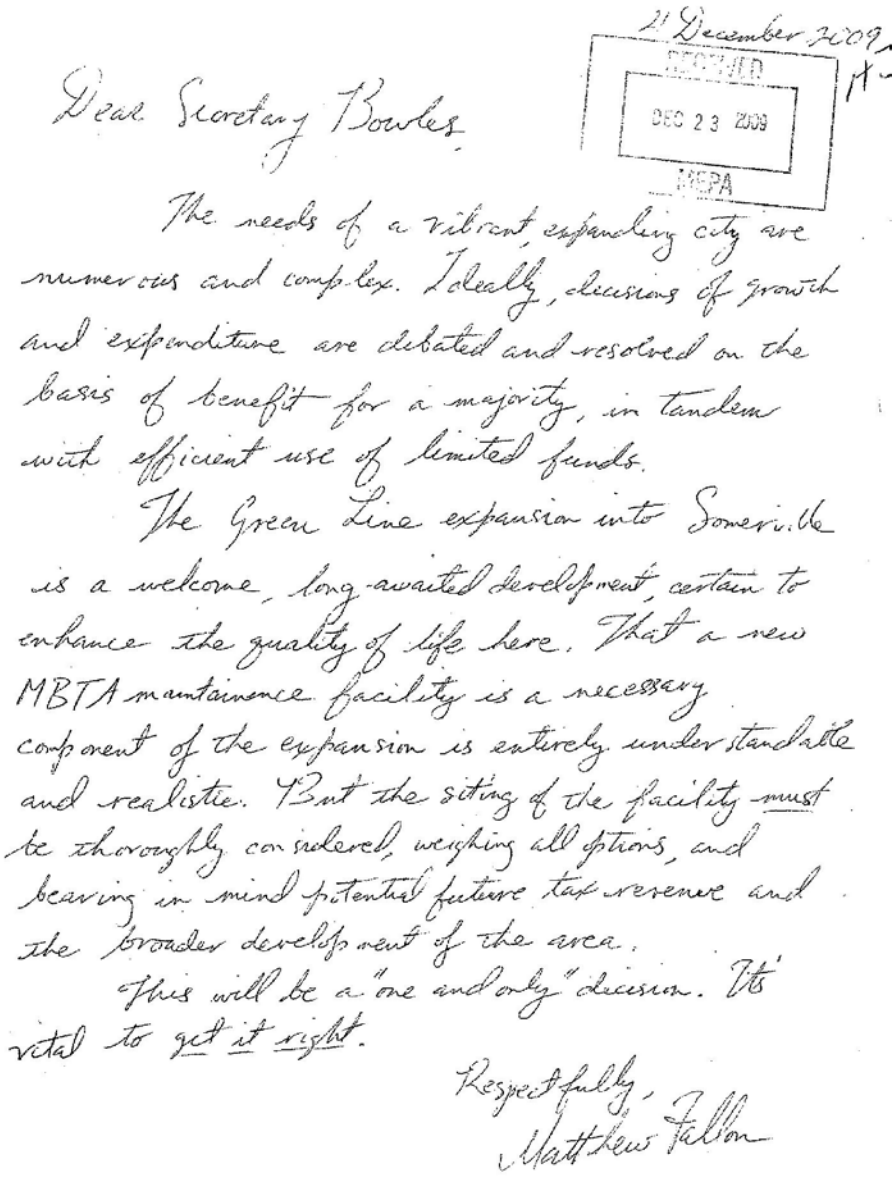
Thank you.

K. Fallon

Keith Fallon

39 Cotting Street

Medford, MA 02155



21 December 2009

RECEIVED
DEC 23 2009
MEPA

Dear Secretary Bowles,

The needs of a vibrant, expanding city are numerous and complex. Ideally, decisions of growth and expenditure are debated and resolved on the basis of benefit for a majority, in tandem with efficient use of limited funds.

The Green Line expansion into Somerville is a welcome, long-awaited development, certain to enhance the quality of life here. That a new MBTA maintainence facility is a necessary component of the expansion is entirely understandable and realistic. But the siting of the facility must be thoroughly considered, weighing all options, and bearing in mind potential future tax revenue and the broader development of the area.

This will be a "one and only" decision. It's vital to get it right.

Respectfully,
Matthew Fallon

I-113-001

I-113-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Johnson, Holly (EEA)

From: Bob Feigin [robertfeigin@yahoo.com]
Sent: Friday, January 08, 2010 11:32 AM
To: Johnson, Holly S (ENV)
Subject: Green Line extension DEIR comments
Attachments: Feigin green line ext DEIR comments.pdf

Ms. Johnson,

Thank you for volunteering your email inbox for the receipt of DEIR comments. My comments are attached. If I can be of any assistance, please let me know.

regards,
Bob Feigin
Medford, Massachusetts

Robert Feigin
26 Dwyer Circle
Medford, MA 02155

January 8, 2010

Via email to Holly.S.Johnson@state.ma.us

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Attn: Holly Johnson, MEPA Analyst
EEA #13886

Re: Comments on the Green Line Extension DEIR

Dear Secretary Bowles:

I am writing to provide my comments on the DEIR for the proposed green line extension. I previously served on the MBTA's Beyond Lechmere Advisory Committee.

I-114-001

I support MassDOT's designation of the Mystic Valley Parkway (Route 16) terminus station, with no parking, as the Preferred Alternative. Nevertheless, the Draft Environmental Impact Report (DEIR) should NOT be accepted as the Final Environmental Impact Report (FEIR) because the DEIR fails to fulfill the requirements set forth by the Executive Office of Environmental Affairs in its Dec. 1, 2006 MEPA Certificate on the Expanded Environmental Notification Form.

I-114-002

The DEIR includes unnecessary eminent domain takings of buildings near Route 16 in Medford. In an appearance before the Medford City Council, EOT representative Stephen Woefel discussed the takings as a 'worst case scenario.' If that is the case, why wasn't a better scenario presented in the DEIR as well?

A better scenario exists, without any unnecessary takings near Route 16, and it has been submitted by the Medford Green Line Neighborhood Association (MGNA). It may also be viewed online at http://www.medfordgreenline.org/MGNA-EIRA/MGNA_Rt16_Design.pdf

I understand, from Mr. Woefel's discussion with the Medford City Council, that MassDOT has developed a 'better scenario' internally as well. If that is the case, it should be presented. As Mayor McGlynn noted in his comment letter, Medford should not be required to accept incomplete information.

I-114-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-114-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

By providing only the worst case scenario for the Route 16 terminus, the DEIR increases the prospect that a Route 16 terminus will be rejected, compelling the terminus to be located at College Avenue instead. A terminus station at College Avenue, however, would not fulfill the state's legal commitment to serve Medford Hillside, per the extensive documentation that MGNA and its members have provided concerning the definition and location of Medford Hillside.

In a final EIR, after rejection of the DEIR, MassDOT should complete its analysis of a Route 16 terminus, taking into account MGNA's submissions concerning station design, track placement and related issues.

Thank you for this opportunity to provide comments.

Very truly yours,

Robert Feigin

Johnson, Holly (EEA)

From: alex the jester [alex@alexthejester.com]
Sent: Thursday, January 07, 2010 10:04 PM
To: Johnson, Holly S (ENV)
Subject: green line + bike path= Biggest bang

Dear Secratary Bowles,

I am very excited that the Green Line is FINALLY coming to Somerville.

I-115-001

I just have one main point to urge: Please fold in the Communnity Path extension into the Green line extension as ONE project. We'll get much more bang for the buck, and each one will compliment the other.

Keep up the good work,

Alex and Ami Feldman
80 Rogers Ave
Somerville

1

I-115-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

January 5, 2010

RECEIVED
JAN 8 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-116-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and

I-116-001

Please see Comment Letter I-002.

neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

James Feldman M.D., M.P.H.
4 Boylston Terrace
Medford, MA 02155

From: 01/07/2010 22:04 #009 P.005

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-117-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-117-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

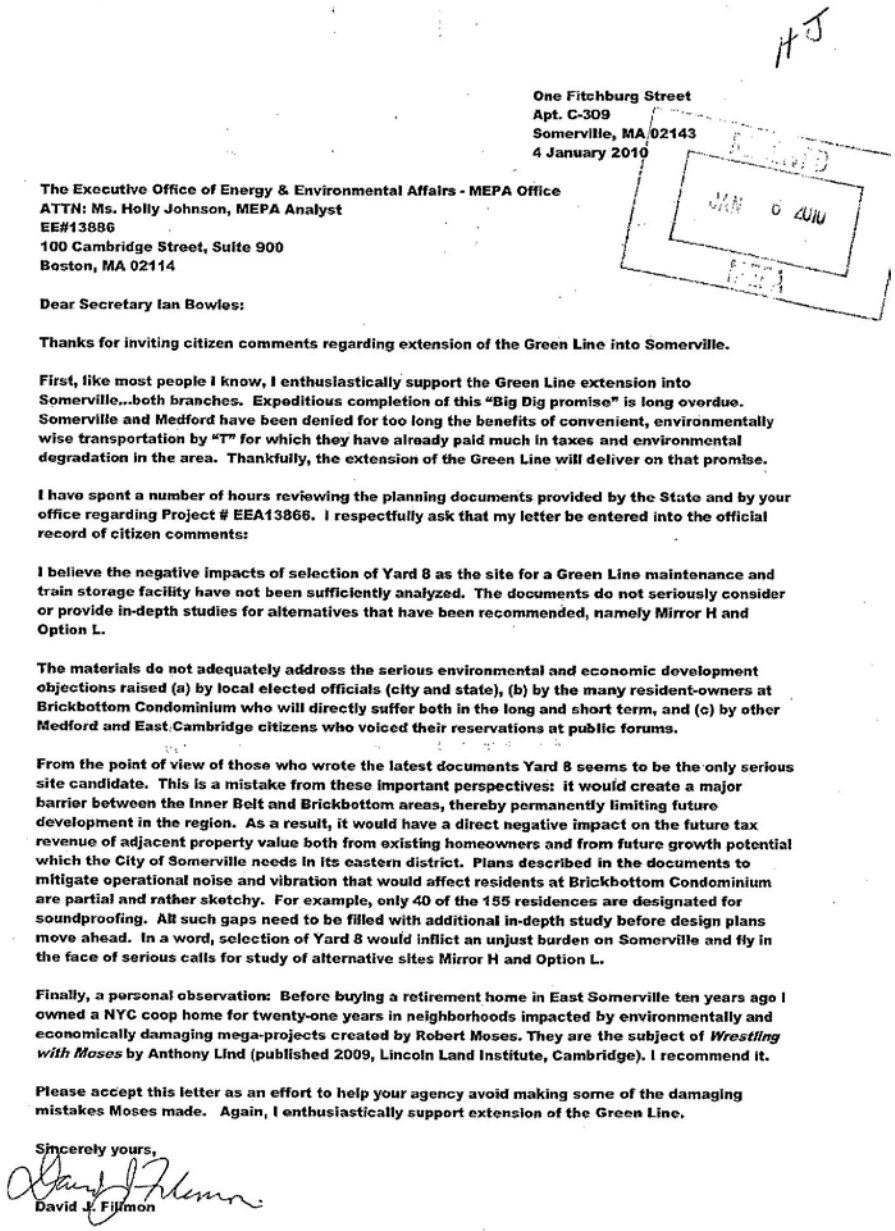
Thank you for hearing my concerns.

Sincerely,

[signature]
Signature

Neil C Fennessey
Print Name

169 Msgr Obrien Hwy 412
Address



H5

One Fitchburg Street
Apt. C-309
Somerville, MA 02143
4 January 2010

The Executive Office of Energy & Environmental Affairs - MEPA Office
ATTN: Ms. Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles:

Thanks for inviting citizen comments regarding extension of the Green Line into Somerville.

First, like most people I know, I enthusiastically support the Green Line extension into Somerville,..both branches. Expeditious completion of this "Big Dig promise" is long overdue. Somerville and Medford have been denied for too long the benefits of convenient, environmentally wise transportation by "T" for which they have already paid much in taxes and environmental degradation in the area. Thankfully, the extension of the Green Line will deliver on that promise.

I have spent a number of hours reviewing the planning documents provided by the State and by your office regarding Project # EEA13866. I respectfully ask that my letter be entered into the official record of citizen comments:

I-118-001

I believe the negative impacts of selection of Yard 8 as the site for a Green Line maintenance and train storage facility have not been sufficiently analyzed. The documents do not seriously consider or provide in-depth studies for alternatives that have been recommended, namely Mirror H and Option L.

The materials do not adequately address the serious environmental and economic development objections raised (a) by local elected officials (city and state), (b) by the many resident-owners at Brickbottom Condominium who will directly suffer both in the long and short term, and (c) by other Medford and East Cambridge citizens who voiced their reservations at public forums.

I-118-002

From the point of view of those who wrote the latest documents Yard 8 seems to be the only serious site candidate. This is a mistake from these important perspectives: it would create a major barrier between the Inner Belt and Brickbottom areas, thereby permanently limiting future development in the region. As a result, it would have a direct negative impact on the future tax revenue of adjacent property value both from existing homeowners and from future growth potential which the City of Somerville needs in its eastern district. Plans described in the documents to mitigate operational noise and vibration that would affect residents at Brickbottom Condominium are partial and rather sketchy. For example, only 40 of the 155 residences are designated for soundproofing. All such gaps need to be filled with additional in-depth study before design plans move ahead. In a word, selection of Yard 8 would inflict an unjust burden on Somerville and fly in the face of serious calls for study of alternative sites Mirror H and Option L.

Finally, a personal observation: Before buying a retirement home in East Somerville ten years ago I owned a NYC coop home for twenty-one years in neighborhoods impacted by environmentally and economically damaging mega-projects created by Robert Moses. They are the subject of *Wrestling with Moses* by Anthony Lind (published 2009, Lincoln Land Institute, Cambridge). I recommend it.

Please accept this letter as an effort to help your agency avoid making some of the damaging mistakes Moses made. Again, I enthusiastically support extension of the Green Line.

Sincerely yours,

David J. Fillmon

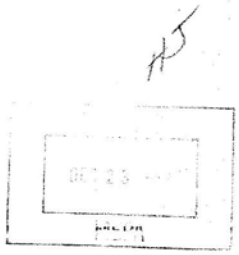
I-118-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-118-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



January 8, 2010
The Executive Office of
Energy and Envior-
-mental Affairs
MEPA Office
Attn: Holly Johnson
MEPA Analyst
EEA#13886
100 cambridge
Street, Suite
900
Boston, MA 02114

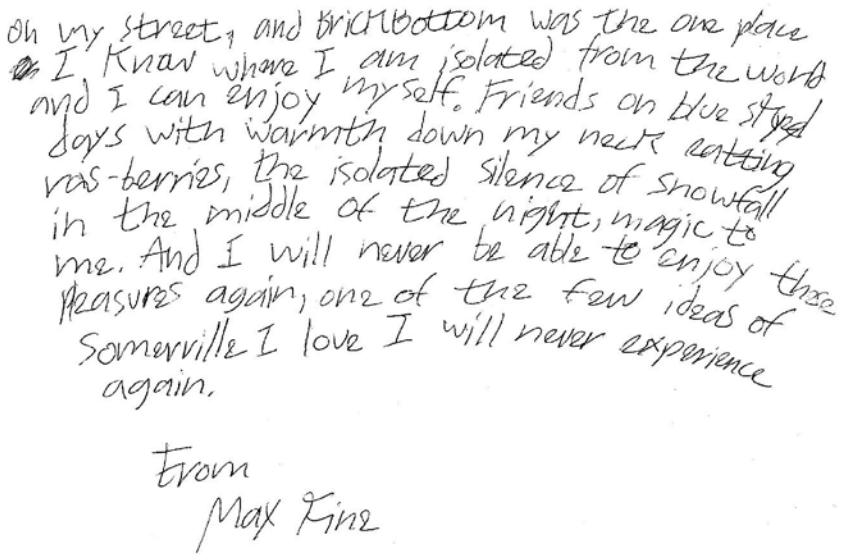
Dear Secretary Bowles,
I am writting to talk about the Green Way
extension. I personaly don't find the extension as
Upsetting as most, as a 13 yearold the disturbing
loud sound that would come from the extension
would eventualy ease into my mind almost Soothing,
and I would grow accustomed to the sound.
But there are two reasons that I agree personaly
that the green way extension should not be
put up. The first reason is there a fair amount
of shall we say the "elderly" in the building
and when the noise of the extensions comes
pounding through the windows, doors, the tiny
cracks of Brick Bottom there will be complaints
and when I hear the complaints I will be
annoyed and when I'm annoyed I will
write you a letter every Single day until the
extension is taken down. But more impatantly
I live in a neighbourhood of loud, repetitive sound.
Peeling paint and garbage littered at every corner

I-119-001

I-119-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-119-002


Oh my street, and Brickbottom was the one place
I knew where I am isolated from the world
and I can enjoy myself. Friends on blue sled
days with warmth down my neck eating
ras-berries, the isolated silence of snowfall
in the middle of the night, magic to
me. And I will never be able to enjoy those
pleasures again, one of the few ideas of
Somerville I love I will never experience
again.

From
Max Fine

I-119-002

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Johnson, Holly (EEA)

From: Norman Fine [finespoon@earthlink.net]
Sent: Tuesday, January 05, 2010 9:55 PM
To: Johnson, Holly S (ENV)
Subject: Please don't build the Maintenance Facility in Yard 8
Attachments: untitled.pdf

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

Life at Brickbottom, although uniquely exciting (despite our unusual location), was to take a new turn. The Green Line Extension to Medford was to afford us greater accessibility to the world and the world to us. The addition of a Bike Path offered us an "Urban Parkway" and greater accessibly in normalizing our lives within our unusual Brickbottom setting.
The area would be revitalized . New developments would occur that would enhance the neighborhood and offer to the City of Somerville increase revenues for its well being.
How fortunate.. this was a greater boon than any of us expected.

I-120-001

Then the "Cloud" appeared and it got progressively darker by the moment..
We, the residents of Brickbottom, were to be the "casualties" in this new undertaking. That despite the mandated meetings to assuage many aching souls.. the maintenance Facility and Storage Yard would proceed to be built in Yard 8.. the designated "best " place for it.

You are hearing many voices. The predominate message echoing back and forth is that it would be a grave mistake to build the Maintenance Facility in this location. This is obvious to a city which will probably lose revenues and the possibility of vitalization for it's residents and business as well. As a business owner in Somerville, I have a great opportunity to benefit from the Green Line Extension. As a resident of Brickbottom, the Maintenance Facility in Yard 8 would imprison us within our homes and put a pall on our neighborhood. The arguments are clear and precise as to how we would be affected. Who would you wish this on?

There are, however, sensible alternatives to this location. Your obligation for mitigation would be realized by building the Maintenance Facility in another location than Yard 8.

Thank you for your attention,

Norman Fine
1 Fitchburg Street, C311, Somerville, MA 02143
normanfinecatering@verizon.net

I-120-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

HJ

Charles S. Fineman

Translator

Danish, French, Norwegian, and Swedish into English

75 Winter Street

Cambridge, Massachusetts 02141-1231

Tel.: (617) 576-1475

Fax: (617) 576-3297

E-mail: charles@fineman.us

Cell: (617) 401-5002

13 November 2009

RECEIVED
NOV 16 2009
MEPA

Secretary Ian Bowles

Executive Office of Energy and Environmental Affairs

MEPA Office

Attn.: Holly Johnson, MEPA Analyst

EEA #13886

100 Cambridge Street, Suite 900

Boston, Massachusetts 02114-2509

Subject: Lechmere T station / McGrath Highway

Dear Secretary Bowles:

By now you should have received the fine letter sent you by Barbara Broussard, an East Cambridge neighbor and the chair of the East Cambridge Planning Group. Like Ms. Broussard, I am a concerned and affected East Cambridge homeowner (though of fewer years standing) who, as someone who is carless-by-choice, depends exclusively on public transportation (and his own two feet) to move about. By the force of circumstance, I am a monthly link pass purchaser from the T and move into and out of the current configuration of public transit offered by the Lechmere T station (both subway and bus), most often taking multiple trips on both forms of transit. I write to express my wholehearted support of the

positions taken by Ms. Broussard and hope your office will take the views of community members into its considerations that affect the shape, location, and functionality of the new Lechmere T station.

I-121-001

To the points raised by Ms. Broussard, I would add the following. In addition to normal neighborhood and commercial activity in the area, East Cambridge in recent years has become a neighborhood of hotels catering to both convention attendees in Boston and tourists to our area generally. Because out-of-towners need to orient themselves quickly and efficiently to our local transit system, often with just the aid of slightly out of date maps or guidebooks, it is all the more essential, for their sakes as well as the sakes of area residents who come into the Lechmere/East Cambridge area only occasionally (let us not forget the influx of visitors to the area who have been called to jury duty at the Middlesex County Courthouse, which is also a major landmark in the neighborhood), the new station must have more than one entrance, those entrances *must* provide shelter from the elements (i.e. an enclosed area for the purchase of Charlie Cards), and the signage must be clear, typographically unambiguous, and strategically positioned to counteract the prevailing mass transit lay-out and attitude, which is that everything is counterintuitive and harder to figure out than it ought to be in what – by the standards of most major US cities -- is a modest and comparatively small transit system.

Before retiring from higher education in 2008, I was a librarian my entire career and as such have 35+ years experience in dealing with the questions people ask to obtain information and the fact that the most urgent need a sign or an information specialist can fulfill is knowing or sensing the *real* question the questioner has in mind, particularly when English may not be that questioner's primary language. There are currently two 'stump-the-panel' questions that come up at Lechmere with such tedious regularity that the city, planners including your office, and the MBTA ought to be embarrassed that they cannot be quickly or easily answered. Question one, when one approaches the current Lechmere T station from the O'Brien Highway (i.e. where two hotels frequented by visitors to our area are located), is: How do I take a train into Boston and isn't this the way in? Question two, when one alights from a train at Lechmere: how do I get to the Cambridgeside Galleria?

The existing signage (i am being very generous, since the current signage is either nonexistent or done in an informal, crudely lettered manner and located in the most counterintuitive location, which is to say useless) at the station is not helpful. MBTA supervisory staff are never in evidence even during daylight hours, so many visitors flail about trying to make what ought to be a simple set of maneuvers to get to the Cambridge Street side of the station.

I-121-002

When the new station is relocated, the information it will need to provide, and the manner in which it will need to be provided (and even the languages in addition to English in which it should be provided), needs to be well thought out and expressed in a typographically clear and studied way. The local method of simply layering newer pieces of information on top of older

I-121-001

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-121-002

MBTA has a standardized signage and map update program for all its stations. MBTA Transit Operations will be responsible for keeping signs and maps current and attractive. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. In accordance with the Secretary's Certificate on the DEIR/EA, the FEIR (Chapter 5, Lechmere Station) includes only conceptual station designs. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-121-002 ones, which might have been acceptable when East Cambridge was not the locus for tourism, trade, and neighborhood traffic that it now is, will no longer do. I strongly urge your office not to make the bad planning mistakes that were made in the past and that were – regrettably – allowed to stand and merely accrete with the passage of years.

I-121-003 I share Ms. Broussard's utmost concern for the safety of pedestrians (but particularly of pedestrians with a disability) who will now need to navigate passage of one of the busiest and dangerous thoroughfares in the area, namely the O'Brien Highway. I do not have a quick solution to this problem. Suffice it to say that, given the high volume of foot traffic the area currently experiences, the problem is already severe and is likely to become more so when the new station and the extension to the Green Line are built even further away from the Courthouse, the Galleria, and local hotels, homes, and shops than is the case today. Again, I express the urgent hope that your office will take the proper measure of this matter and arrive at a solution that gives the highest priority possible to pedestrian safety in the redesigned area.

I wish you and your colleagues luck in addressing and resolving these issues, which are of vital concern to this community.

Cordially yours,

Frances L. Freiman

Copy (for information): B. Broussard, 148 Third Street, Cambridge, MA 02141

I-121-003

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk and sidewalk improvements that are consistent with the approved NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the project.

January 3, 2010

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston MA 02114

Dear Secretary Ian Bowles,

As a longtime resident of the Brickbottom Artist Building and Somerville's Union Square (for almost 30 years, 21 at Brickbottom), I write to join other Somerville residents to express my deepest concerns about the placement of the Maintenance Facility and Storage Yard in what is called Yard 8.

I-122-001

While I, of course, support the extension of the Green Line, I am confused and dismayed at the suggestion to locate the facility so close to Brickbottom and in an area that has, potentially, great value for the economic development of Somerville. My concern is not only for the Brickbottom community but also for the larger community.

As an owner/resident at Brickbottom, I am especially concerned, however, with the impact this maintenance facility will have on the life of residents here. We already deal with an abundance of noise and air quality issues surrounding Brickbottom: a waste reprocessing center, a U-Haul distribution point, a parking lot for school busses, the McGrath Highway, an Amtrak train line that runs along the Boston side of Brickbottom, and a number of car repair lots. The result is a mash-up of noise, vibrations, smells and disruption that we have put up with because of our extraordinary dedication to and love of our neighborhood and community.

We have 220 residents here – families with babies and teenagers, elderly people and young artists just starting out. Our community works because we are eager and determined to develop the good work Brickbottom does for the art scene and for Somerville. We are always working to deepen our ties and commitment to the larger community and to each other.

I-122-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

My concern is that the Yard 8 placement at the edge of Brickbottom will be one burden too many for residents to absorb. That years of working to create a community will be lost.

Please reconsider the location of the maintenance facility in Yard 8. Please listen to the grave concerns of the residents of Somerville – not just those of us at Brickbottom – who will be so deeply affected.

I-122-002

Also, I ask that you please keep the community involved as this project moves forward. It is so important for us to be heard.

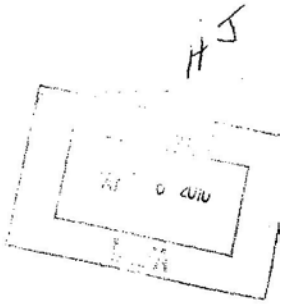
With my thanks and best regards,



Lois Fiore
C-204
Brickbottom Artist Building
Somerville, Mass. 02143

I-122-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



January 04, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-123-001

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state,

I-123-001

Please see Comment Letter I-002.

and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

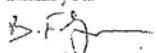
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

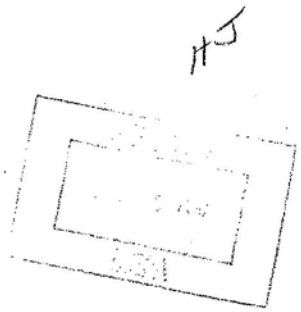
Thank you.



Brian Flynn

9 Winthrop Ct

Medford, MA 02155



The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

January 2, 2010

Reference to the Project Number EEA #13886

Dear Secretary Ian Bowles,

I wish to thank you for encouraging the residents of Somerville, Cambridge and Medford to state their opinions concerning the Draft Environmental Impact Report (DEIR) and in particular the report on the Maintenance Facility and Storage Yard alternatives.

I-124-001

As an early supporter of the Green Line Extension to Medford, I believe the extension is both physically helpful and a boost to the development of the entire area served. The issue I have with the DOT is their position on the placement of the Maintenance Facility and Storage Yard in what is called Yard 8 in the Brickbottom and Innerbelt area of Somerville. Although I note that the DOT is also interested in exploring other areas such as Mirror Scheme H and Scheme L for their facility project, the fact remains that it still proposes Yard 8 as the principle place for the Maintenance Facility in the face of near total objection and opposition from all quarters of the general community, as witnessed at the recent open meetings held by the DOT. I can only surmise that the DOT is not seriously interested in the opinions of the residents at large, though by law they must hold these meetings.

From the discussions at the open meetings two very important questions were raised. First was the negative impact the Maintenance Facility would have on the economic development on the area from Lechmere to Brickbottom/Innerbelt. The second was the affect the Maintenance Facility and Storage Yard would have on the quality of life of the residents who live in the vicinity of the facility.

As an artist resident and homeowner at the Brickbottom Artist Buildings (there are three) I must take issue with the DOT on the placement of the Maintenance Facility in Yard 8 which is directly adjacent to the northeast side of the three buildings. As the map in the DEIR report indicates, if the plans go forward, we as a community would be adversely affected. The track systems will run on three sides

I-124-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-124-002

of our buildings, i.e., the Greenline Extension to Medford, the Greenline extension to Union Square, the Fitchburg Commuter line to Boston, the BET train yards and their maintenance facility, the Pan Am freight track and finally the Greenline Maintenance Facility and track yards only 18 feet from our buildings. According the report on the Maintenance Facility, the activity of the trains in all directions will begin at 5AM in the early morning and continue continuously until 1AM in the morning. The noise and vibration made by all the trains moving back and forth all day long past our buildings would amount to a "daily nightmare" placed on the residents and workers (yes we do work here) at the Brickbottom Artist Buildings. Even if the DOT decides to put the facility and track yards elsewhere, we, the residents would still have to live with the enormous disadvantages posed by the trains running all day long. Without a major investment in mitigating our circumstances, our lives here would be made impossible. In the DEIR report DOT proposes mitigation for windows in only 40 apartments out of 155. This is insulting and maybe criminal as it may violate existing laws concerning human habitation.

In order to effectively alleviate the problems caused by the Greenline extension project, I propose that twenty foot high walls be place on the Northeast and South sides of our buildings and adjacent to the new track systems. New windows that meet the minimum requirements for noise abatement must be installed on all sides of the buildings that do not meet normal noise standards.

I am enclosing an article from the December 20, 2009 edition of *The Boston Sunday Globe*, that discusses the usefulness of highway barriers to not only block noise but also block pollution. Because the buildings will be surrounded by multiple tracks, as well as the McGrath Highway these barriers will be efficacious for the Brickbottom artist community.

Finally, let us, the DOT and the cities of Cambridge, Somerville and Medford go forward with this project with due respect and amity for all.

Sincerely,

George Gabin

I-124-002

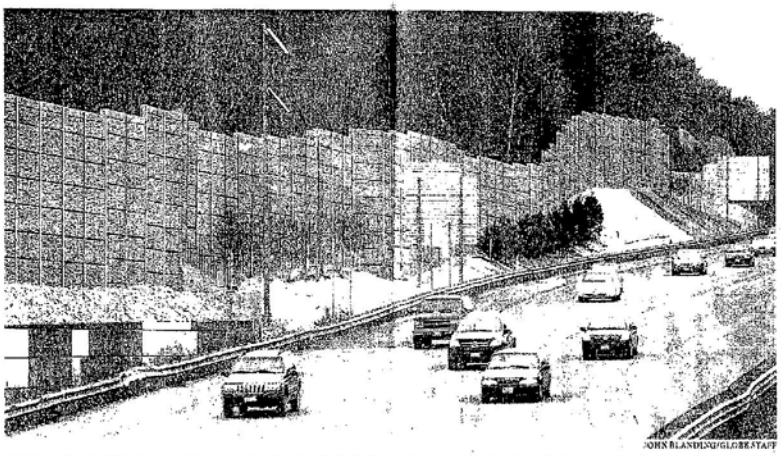
As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

ECEMBER 20, 2009 BOSTON SUNDAY GLOBE Metı

Starts & Stops

BY NOAH BIERMAN, GLOBE STAFF | TRAFFIC UPDATES ONLINE AT WWW.BOSTON.COM/STARTS

lighway arriers block ıuch more ıan sound



JOHN BLANDING/GLOBE STAFF

Traffic on Route 128 at a sound barrier in Lexington. A study found that concrete barriers deflect air pollution as well as sound.

It's tough to think about car ıast and eight-lane highways en you're in a sparse Idaho ert, staring at bales of straw. But such was the task for a up of federal research meteorgists last year who conducted udy on traffic sound barriers. ir findings, set for publica- ı next month in the journal ıosphere Environment, bol- the arguments of neighhood activists who often by for the expensive concrete ls.

The research found that the rriers do more than protect ghbors against unwanted nds. They also keep pollution y, reducing it by more than ercent on the other side of barrier.

To simulate car fumes and er pollutants, the scientists d harmless proxy gases that measurable at very low levels, l Dennis Finn, the lead author a research meteorologist at National Oceanic and Atmosric Administration Air Reırces Laboratory in Idaho s, Idaho.

Finn and his team set up a ual highway in the desert, he said, using the bales of straw to simulate concrete barriers.

Then they let out the gas upwind of a barrier, sampling the air on the other side. They set up a parallel experiment without a barrier so they could compare results.

Finn said the 50 percent drop in pollution mirrored findings of other barrier tests conducted in real-world conditions. The advantage in the desert test was that he could control for such outside factors as trees and inconsistent car traffic that can affect real-world tests.

Finn said the gas released in front of the barrier gets picked up by the wind. Some hits the barrier; some goes above the barrier but disperses rather than coming down on the other side.

But Finn said that some scientists had previously hypothesized that pollutants could become trapped on the other side of a barrier, where the neighbors live, because wind would be blocked and there would be nothing to disperse the fumes.

Finn lives in an Idaho town with only one highway and relatively few neighbors. He said research does not mean much to his daily life.

But what if he lived in a big city, say next to the Massachusetts Turnpike? Would he want a barrier?

"I would certainly be appreciative of it, I think, if I was living within 100 yards of a heavily traveled road," he said. "A sound barrier would reduce

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From: 01/07/2010 21:30 #008 P.001

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-125-001 As a resident of East Cambridge, I am concerned about the design and placement of the Green Line Extension and the new Lechmere Station and the effect it will have on my friends & neighbors at the Glass Factory.

TRACKS ARE TOO CLOSE TO THE GLASS FACTORY.
The present design shows the tracks running very close to the rear of the building. We urge your designers and engineers to place the tracks as far to the rear of the building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of the building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of the Glass Factory, pick up passengers, and emerge at the other end of the building. Please do not route bus traffic, directly under people's windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from the building to preserve privacy and minimize impacts from noise, light and smoking.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind the Glass Factory. I urge you to preserve all these trees and the entire small green space behind the building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-125-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of ~~the~~ building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to ~~the~~ building.

Thank you for hearing my concerns.

Sincerely,

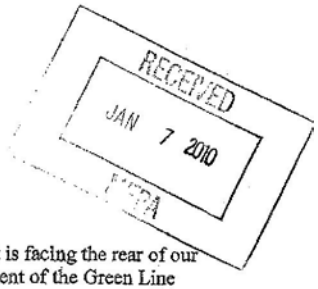
Florence L. Gates
Signature

Florence L. Gates
Print Name

58 Seventh St #1
Address

HJ

January 6, 2010



Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-126-001 As a resident of the Glass Factory Condominiums whose unit is facing the rear of our building, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-126-001

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The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Peter Gee
Signature

Peter Gee
Print Name

169 Msgr. O'Brien Hwy. #612
Address

Cambridge, MA 02141

Diane Georgopulos FAIA
150 Cambridge St Unit A104
Cambridge, MA 02141

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

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NOV 12 2009
MEPA

November 12, 2009

Dear Secretary Bowles,

I have heard you speak on many occasions and have always been proud to have someone as articulate and informed as you to lead one of the Commonwealth's most important agencies. I am writing to apprise you of a situation that I believe, if it were more closely examined, might stimulate more investigation by your staff. I am concerned about the placement of the new Lechmere Station and the necessity of creating a truly safe intermodal transit station.

As you may know, the Green Line expansion will open up a new corridor for development as well as serve many residents currently not served or underserved by public transit options. The site that has been designed for the new Lechmere Station while laudable as part of this greater scheme, is deeply flawed when one considers pedestrian safety as well as transit oriented design in a fuller appreciation.

I-127-001

If you go to Lechmere Station now and observe the existing heavy flow of pedestrians crossing Cambridge Street you will see many infuriated motorists who frequently miss traffic signals that would otherwise allow them to proceed because of the density of foot traffic. This is an extremely dangerous condition, of particular concern now when these same pedestrians will be crossing over the major thoroughfare of Monsignor O'Brian Highway as part of the Lechmere Station redesign. According to previous studies as many as one million pedestrians cross Cambridge Street annually. As you might expect, many of these Green Line riders are teenagers and young mothers with strollers and toddlers who do not own cars and find the Galleria a convenient location for shopping.

I-127-002

Further, the proposed station design makes no concession to protect passengers from the elements. This is a mistake. While we are encouraging passengers to take the T, the last

I-127-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-127-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-127-002

thing we want is them to feel is like they are being punished by our winters standing in the cold waiting for a train or bus.

I-127-003

Finally, I would urge you to consider the Lechmere Station as a transit oriented design in the fuller promise it can provide through promoting retail activity. I have seen a creative proposal presented to the East Cambridge Planning Team that re-purposed the existing and potentially historic bus barn as a covered market. Photographs of a market in Paris of comparable size were also shown, and although one might think it unduly fanciful to consider such a re-use proposal, this is the exact sort of identity building authenticity that creates neighborhood character. I would be most delighted myself to see the local fish dealers, poultry market, bakery and dry cleaner all further down Cambridge Street have stalls or kiosks in such a market. The convenience value of retail activity coordinated with transit cannot be underestimated.

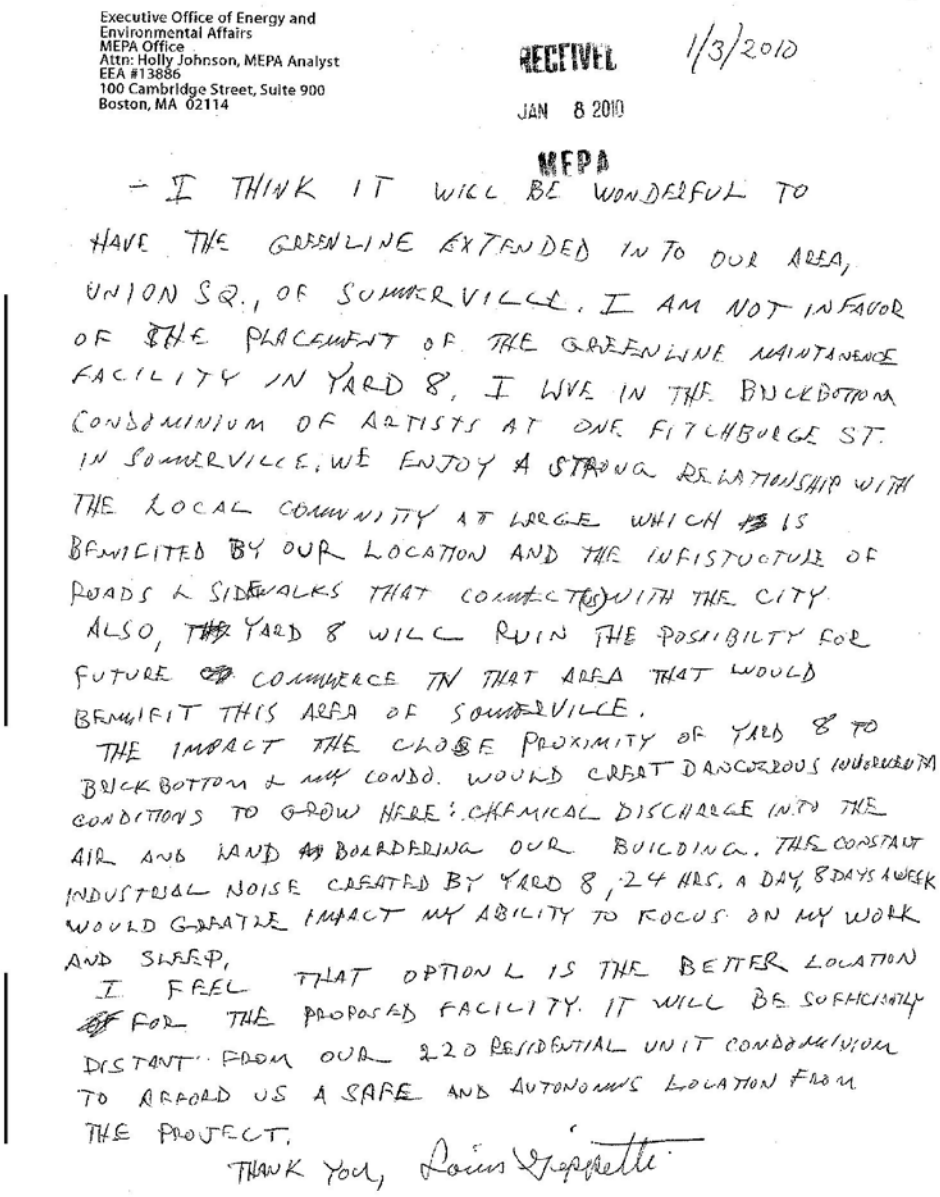
I hope my letter encourages you and your staff to reconsider the design and placement of the Lechmere Station. We rarely get these opportunities to place infrastructure in the fabric of our cities and towns. And so it must be done with great care and appreciation of public health, safety and welfare.

Very truly yours,

Diane Georgopulos FAIA

I-127-003

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.



Executive Office of Energy and
Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED 1/3/2010

JAN 8 2010

MEPA

I-128-001

- I THINK IT WILL BE WONDERFUL TO HAVE THE GREENLINE EXTENDED IN TO OUR AREA, UNION SQ., OF SUMMERVILLE. I AM NOT IN FAVOR OF THE PLACEMENT OF THE GREENLINE MAINTANENCE FACILITY IN YARD 8. I LIVE IN THE BRICKBOTTOM CONDOMINIUM OF ARTISTS AT ONE FITCHBURGE ST. IN SOMERVILLE. WE ENJOY A STRONG RELATIONSHIP WITH THE LOCAL COMMUNITY AT LARGE WHICH IS BENEFITED BY OUR LOCATION AND THE INFISTUCTURE OF ROADS & SIDEWALKS THAT CONNECT(S) WITH THE CITY. ALSO, YARD 8 WILL RUIN THE POSSIBILTY FOR FUTURE COMMERCE IN THAT AREA THAT WOULD BENEFIT THIS AREA OF SOMERVILLE.

THE IMPACT THE CLOSE PROXIMITY OF YARD 8 TO BRICKBOTTOM & MY CONDO. WOULD CREAT DANGEROUS INVIRONMENTAL CONDITIONS TO GROW HERE: CHEMICAL DISCHARGE INTO THE AIR AND LAND BOARDERING OUR BUILDING. THE CONSTANT INDUSTRIAL NOISE CREATED BY YARD 8, 24 HRS. A DAY, 8 DAYS A WEEK WOULD GREATLE IMPACT MY ABILITY TO FOCUS ON MY WORK AND SLEEP.

I-128-002

I FEEL THAT OPTION L IS THE BETTER LOCATION FOR THE PROPOSED FACILITY. IT WILL BE SUFFICIENTLY DISTANT FROM OUR 220 RESIDENTIAL UNIT CONDOMINIUM TO AFFORD US A SAFE AND AUTONOMOUS LOCATION FROM THE PROJECT.

THANK YOU, Louis Gippetti

I-128-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-128-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Geuns, Hans [Hans.Geuns@nuance.com]
Sent: Friday, January 08, 2010 4:16 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension/DEIR comments

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analysis
EE #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles

As a citizen of Medford who is committed to the environment and to life without a car (despite living two miles from the nearest T stop),

I applaud the effort that went into putting together the Draft Environmental Impact Report (DEIR) for the Green Line Extension project

to Medford, EE #13886.

I-129-001

I strongly support the Green Line extension and urge that it be built in an expeditious manner that provides the most benefit to citizens

and to the environment. That is, the extension must be built in a single phase to extend to the "Preferred Alternative" terminus at Route

16/Mystic Valley Parkway.

MassDOT states that it is not capable of building (and funding) an extension to Route 16, and therefore that it intends to build the extension

only toCollege Avenue in the Tufts University area of Medford by its 2014 deadline. However, the DEIR is also clear that the Route 16

station would provide the most benefits according to all project criteria, including air quality and environmental justice.

A two-phased approach is not acceptable. The Route 16/Mystic Valley Parkway Station must be built as part of a single-phase project in order to:

I-129-002

- Minimize costs: inefficiencies in the two phased approach by MassDOT's estimates will inflate the cost by $55 million over a single-phase approach

1

I-129-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-129-002

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-129-002 - Ensure completion: without an identified funding source there is a very high probability that the Route 16 terminus will not be built in this century

- Provide the greatest air quality improvements, mobility improvements, ridership gains, traffic reduction, and service to environmental justice communities

I-129-003 - Achieve the legal mandate: The state is legally obligated to provide public transit services to the residents of Medford Hillside by December 31, 2014, and stopping the extension at College Avenue fails to meet this legal obligation.

I-129-004 The document does not analyze the impacts of College Avenue station as the Phase I terminus. A terminus station would have a dramatically

different operation and impact on the neighborhood than would a midroute stations. It just does not make sense to subject the area to endure the costs and adaptation that would be necessary to function as an "interim terminus" given that the Route 16 site would function as a far more suitable terminus.

I-129-005 The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's own description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. In particular, the design in the DEIR necessitates the destruction of two major commercial properties. An early EOT design accommodated the existing buildings, and Medford Green Line Alliance (MGNA) has provided another design with a slight curvature of the tracks to avoid conflict with the buildings. An optimized Route 16 station design must be incorporated into the final EIR after study of the MGNA (and MassDot's own) better designs.

I urge you to require MassDOT to continue its analysis and design modifications to address the deficiencies in the current DEIR.

There is much work to be done to ensure that the Green Line extension fulfills its mandated potential.

Sincerely,

Hans Geuns-Meyer
54 Whitney Rd
Medford, MA 02155

hans.geuns@nuance.com
hansgeunsmeyer@earthlink.net

I-129-003

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-129-004

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-129-005

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and

layout, neighborhood impacts, economic development, and other area planning issues.

EE #13886, S. Geuns-Meyer

January 7, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analysis
EE #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles

As a citizen of Medford who is committed to the environment and to life without a car (despite living two miles from the nearest T stop), I applaud the effort that went into putting together the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EE #13886.

I-130-001

I strongly support the Green Line extension and urge that it be built in an expeditious manner that provides the most benefit to citizens and to the environment. That is, the extension must be built in *a single phase to extend to the "Preferred Alternative" terminus at Route 16/Mystic Valley Parkway*.

MassDOT states that it is not capable of building (and funding) an extension to Route 16, and therefore that it intends to build the extension only to College Avenue in the Tufts University area of Medford by its 2014 deadline. However, the DEIR is also clear that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice.

A two-phased approach is not acceptable. The Route 16/Mystic Valley Parkway Station must be built as part of a single-phase project in order to:

I-130-002

- Minimize costs: inefficiencies in the two phased approach by MassDOT's estimates will inflate the cost by $50 million over a single-phase approach.

- Ensure completion: without an identified funding source there is a very high probability that the Route 16 terminus will not be built in this century; such a failure would be a terrible detriment to the environment and to future generations.

- Provide the greatest air quality improvements, mobility improvements, ridership gains, traffic reduction, and service to environmental justice communities within walking distance of the Route 16 terminus.

I-130-003

- Achieve the legal mandate: The state is legally obligated to provide public transit services to the residents of Medford Hillside by December 31, 2014, and stopping the extension at College Avenue fails to meet this legal obligation. (It is not possible/ acceptable for MassDOT to redefine the boundaries of "Medford

I-130-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-130-002

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-130-003

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred

I-130-003

Hillside" in order to diminish the size of the mandated project. Medford Hillside always has been and shall be the area around Boston Avenue that extends from College Avenue to the Mystic River

I-130-004

The document does not analyze the impacts of College Avenue station as the Phase I terminus.
A terminus station would have a dramatically different operation and impact on the neighborhood than would midroute stations. It just does not make sense to subject the area to the environmental adaptation that would be necessary to function as an "interim terminus" given that the Route 16 site would function as a far more suitable terminus.

I-130-005

The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's own description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. In particular, the design in the DEIR necessitates the destruction of two major commercial properties. An early EOT design accommodated the existing buildings, and Medford Green Line Alliance (MGNA) has provided another design with a slight curvature of the tracks to avoid conflict with the buildings. Further, there is so much potential for transit-oriented development at a Route 16 terminus that is not yet addressed. An optimized Route 16 station design (minimizing the taking of commercial property and maximizing pedestrian and cyclist access and connections) must be incorporated into the final EIR after study of the MGNA (and MassDot's own) better designs.

I urge you to require MassDOT to continue its analyses and design modifications to address the deficiencies in the current DEIR; and that you use your best judgment with regard to the mechanism by which to ensure a quality extension of the Medford Green Line extension to Route 16 by the 2014 deadline. There remains so much work to be done to ensure that the Green Line extension fulfills its mandated potential.

Yours,

Stephanie Geuns-Meyer
54 Whitney Rd
Medford, MA 02155
781-396-4648

p.s. This is somewhat of a tangent, but I want to make the point that over the years the City of Medford has failed to engage in planning for the Green Line extension in any meaningful way, and therefore that they have failed Medford citizens, the environment, and future generations. Please do not allow the lack of competence and vision of the City to destroy this once-in-a-century opportunity.

Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-130-004

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-130-005

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

City officials are generally focused on short term awards and returned favors, and their engagement with the Green Line planning process has been largely a stance of strategic helplessness.

How can one work with a City of Medford who whines, "Ehhh, why won't you walk with us, Daddy!?" when in fact they want to be carried? Perhaps some gentle guidance would be in order. "I'll walk with you, dear, but first you must stand on *your own two feet*!"

That is:

"I *know* that parking enforcement is very important! Why don't *you* find out what the City of Somerville has done to address the issue? Maybe you can even turn parking enforcement into a source of revenue – how about that!?"

"Yes, when residential areas become better places to live (as happens when good mass transit is introduced), prices tend to go up. People call that gentrification. Do you think it follows that it is a bad idea to make the places people live more desirable? No? Then good! What can *you* do to ensure that there will remain affordable places to live for everyone?!"

January 4, 2010

RECEIVED

JAN 8 2010

MEPA

Executive office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA#13886
100 Cambridge Street,
Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles and MEPA Analyst Holly Johnson

I am the owner of three properties at Brickbottom. Thank you for taking the time to read my letter. Let me begin by saying that I a fully behind the extension of the Green Line. It will be a most transformative element in many people's lives. At the same time I want to strongly urge you in helping put this plan into to being to consider the merits of Mirrow Scheme H.

First let me describe the role of Brickbottom in the area as I and many others see it. It is well known that artists are like yeast. We go into areas that no one wants and we by our presence raise the property values and the lives of those around us. We have created a very special environment at Brickbottom, a magnet for many communities with our art shows and our outreach. The building is alive at night and rescues the area from being an industrial wasteland. Where artist are the public benefits.

I-131-001

Now, this has been acknowledged by the Mayor and economic experts as a prime area for redevelopment. The proposed site of the EOT to put a maintenance and storage facility in "Yard 8" would destroy that possibility and also destroy our living situation as it stands. The land taken would remove 11.5 acres from the City and remove it from the city's commercial tax vase, a most foolish thing to do in these very troubled times.

Environmentally speaking what will this Yard 8 scheme do? It will destroy the living conditions for the residents of Brickbottom by bringing noise and light pollution as well as a potential toxic runoff into the ground water and the Charles River Watershed. Construction at yard8 would require complex and expensive construction mitigation because it is so close to exiting homes.

I believe that Yard 8 is being rushed through without our input and that the mandated use planning was not performed. We are mindful of the disaster which befell home owners when Pizer came into a community used right of eminent domain to throw people out of their homes and then several years later without warning pulled out of their development leaving a shocked and bereft group of citizens behind. Will the same high-handedness prevail here?

I-131-002

Let me say again. I am in favor of the extension but decisions have been made behind closed doors and all alternative proposals have been DISMISSED by EOT. It is not just ourselves at risk it is East Somerville, the city and the region. Meanwhile The Mirror Scheme places the bulk of the facility to an existing rail maintenance facility and further away from current residential uses.

I-131-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-131-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-131-002

I-131-003

So why is that not the ideal solution? Why this rush to invade our space at the price of destruction on so many fronts.

Lastly, one can simply decouple the Green Line planning and design from the maintenance and storage facility because that facility is NOT part of the mandated 2014 Green Line Extension completion deadline. So in whose interest is this most injurious plan being rushed through? This is a plan for 100 years. Draft EIR should not be allowed to become the final EIR.

At a time when the public is aware of how many noxious plans have been secretly made and put into action, at a time when daily we learn how safeguards for public welfare have been brazenly ignored, for example, the BIG DIG why should we trust a program that has not shown us how even the maintenance will be secure and efficient. Very little is these days.

I hope you will to listen to Brickbottom's well thought out questions and proposals and take time and reconsider what better plans than the present Yard 8 could be put in place.

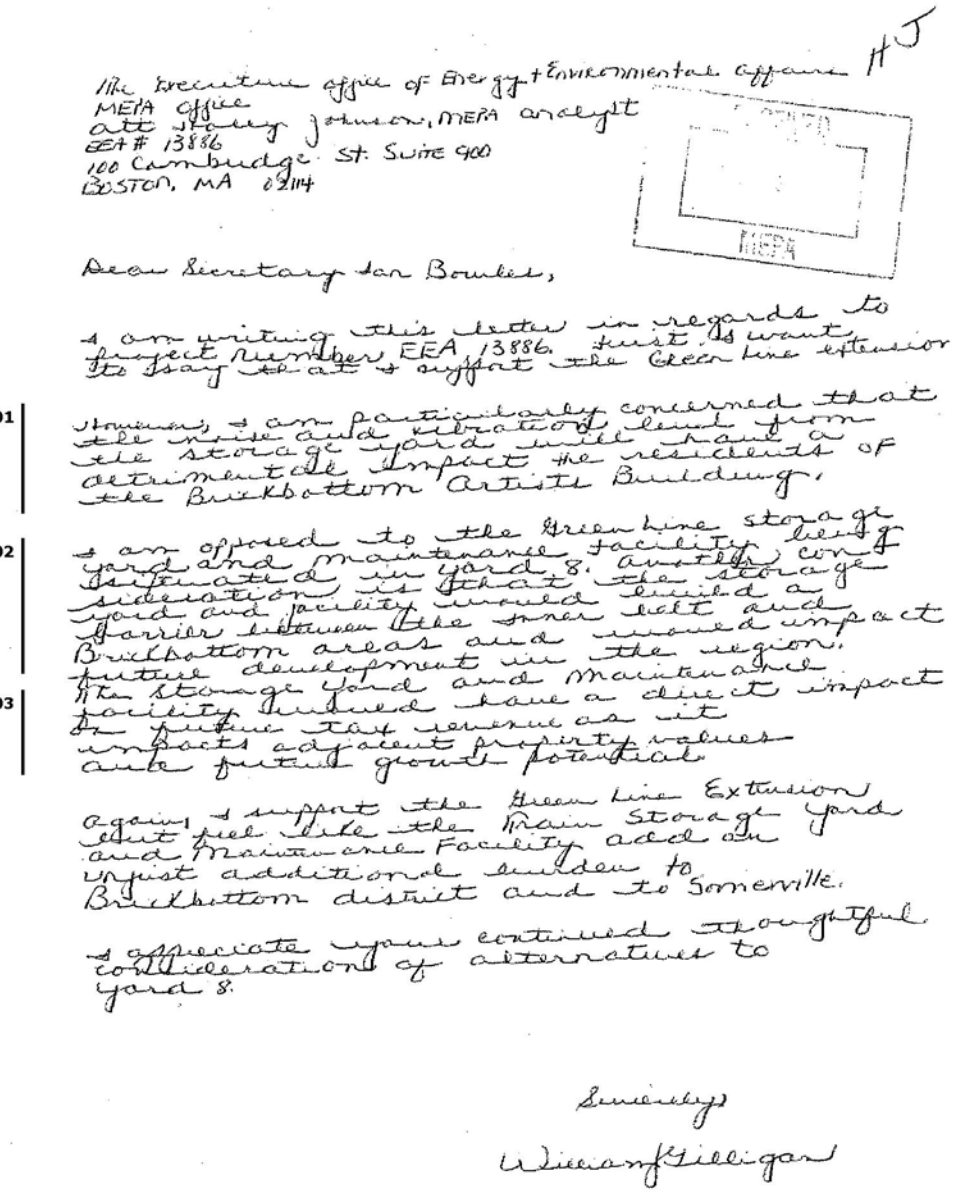
Sincerely,
Celia Gilbert

Celia Gilbert property owner
Brickbottom

C207 ; C319 ; C214

I-131-003

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.



The Executive office of Energy + Environmental affairs HJ
MEPA office
att Holly Johnson, MEPA analyst
EEA # 13886
100 Cambridge St. Suite 900
BOSTON, MA 02114

MEPA

Dear Secretary Ian Bowles,

I am writing this letter in regards to project number EEA 13886. First, I want to say that I support the Green Line extension

I-132-001 However, I am particularly concerned that the noise and vibration level from the storage yard will have a detrimental impact the residents of the Brickbottom Artists Building.

I-132-002 I am opposed to the Green Line storage yard and maintenance facility being situated in yard 8. Another consideration is that the storage yard and facility would build a barrier between the inner belt and Brickbottom areas and would impact future development in the region.

I-132-003 The storage yard and maintenance facility would have a direct impact on future tax revenue as it impacts adjacent property values and future growth potential.

Again, I support the Green Line Extension but feel like the Train Storage Yard and Maintenance Facility add an unjust additional burden to Brickbottom district and to Somerville.

I appreciate your continued thoughtful consideration of alternatives to yard 8.

Sincerely,

William J Gilligan

I-132-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. Vibration impacts and mitigation measures have been identified and are included in FEIR Chapter 2. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-132-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-132-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site. A discussion of the socioeconomic impacts of the maintenance facility sites is included in FEIR Chapter 2.

Johnson, Holly (EEA)

From: sheilegirl@gmail.com on behalf of S Gilmartin [sheilagilmartin@gmail.com]
Sent: Friday, January 08, 2010 10:43 AM
To: Johnson, Holly S (ENV)
Subject: Medford Green Line Extension

I-133-001 | I am writing to request further environmental review of the Green Line project.

Sheila Gilmartin
4 Wolcott Park
Medford, MA 02155

I-133-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Johnson, Holly (EEA)

From: ethan gilsdorf [ethan@ethangilsdorf.com]
Sent: Monday, January 04, 2010 8:16 PM
To: Johnson, Holly S (ENV)
Subject: Regarding EEA #13886 Green Line extension DEIR

Secretary Ian Bowles/Holly Johnson
MEPA Analyist

Dear Secretary Ian Bowles,,

I-134-001 The community members engaged with CCP would like to see all decisions related to the planning of the Green Line and the land use in the ¼ mile areas around the 7 proposed stations to reflect this list of Corridor Core Principles. Please see third paragraph for list of Core Principles and corresponding suggested changes to Draft Environmental Impact Report (DEIR).

The Community Corridor Planning project, a grassroots effort to engage community members in the land use planning along the Green Line extension, has brought together hundreds of people to frame a list of core principles to guide their recommendations for land use along the extension in upcoming months. We ask that these principles be taken into consideration as the Mass. Department of Transportation finalizes its Environmental Impact Report.

Core Community Principles for
Neighborhood Development Along the Green Line Corridor

? More Local Jobs: We want a fixed percentage of respectable jobs of all types with good wages and benefits for Somerville residents, from construction to permanent.

? Increase Commercial and Economic Development: We want to see the creation of squares as destinations, with careful attention to mixed use of commercial/residential, reuse of buildings, and economic development to increase the tax base.
o Draft Environmental Impact Report (DEIR) does not address Department of Transportation (DOT) commitment to economic development
o New MA DOT is supposed to work with Secretary of Economic Affairs to promote station location and design that promotes economic development and the community needs to show MA DOT how to do this ? to change the paradigm pro-actively.

? Improve the Green Environment: We want a safe, environmentally friendly neighborhood with more green space, trees, and gardens; reduction of noise; avoidance of light pollution; and prevention of toxic chemicals in the air.
o Response to DEIR: Given this principle, it is important that more attention be given to:
o Noise of operations
o Mitigation during construction for noise, vibration, etc.
o How close the tracks will be to the Brickbottom Building and other buildings along the right of way
o The need to involve neighborhoods affected regarding noise and vibration
o Recommendation that testing be done immediately after project begins to determine if estimates for vibration and noise done for the DEIR are accurate.
o Possibly transfer at Ball Square but only if Commuter rail is electric not diesel because of the pollution it would create for neighbors
o Rep. Provost noted in comments made that diesel trains should not stop in Somerville. This should only be permitted if trains are electrified

1

I-134-001

Please see Comment Letter I-084 for responses to this form letter.

o Consider dual-mode conversion of existing commuter trains
? Encourage Walking and Biking: We want to encourage walking and cycling, through safe, bike/pedestrian friendly design of streets and paths around and between stations.
o Pedestrian accessibility is poor for the station designs in the DEIR
o The design required in the MEPA Scope (EENF) does not sufficiently address the detailed concerns and requirements for each station.
o In the DEIR design and engineering is insufficient for moving the project to a final EIR because of a range of unaddressed issues (i.e., station design, siting, bike parking, community path integration)
o Bike access and bike parking at all stations needs to be improved.
o New Light Rail Vehicles (LRVs) should be designed to accommodate bicycles (like Portland LRVs)
o The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

? Create Community Gathering Spaces: We want both indoor and outdoor safe, public gathering spaces for community members.

? Improve Access: We want above standard, safe access to and between stations for people with disabilities, strollers, and pedestrians in general

? Community Involvement: We want to make sure residents are included on an ongoing basis in the planning, design, and zoning changes to the stations and areas around them. Youth, artists, and others should help design stations, with attention to amenities. We need an easy and clear process for residents to address problems as they come up, with ways of immediately resolving unseen impacts.
o Ongoing Community participation in the next phase (presumed to be done as a design/build project) is necessary
o Public involvement will help to keep decision-making public (transparency)
o Need to have a field office that residents can go to with concerns on an ongoing basis
o Need neighborhood based community groups to be involved in planning around each station,
? Connecting Buses and Trains: We want to ensure inter-modal access between neighborhoods and stations, for new train service to be adequate and speedy, and for existing bus lines to continue to serve areas not connected by train.
o Need opportunity for future connection with other lines, such as Red Line at Porter Square.
o Several stations do not show bus stops, or nearest bus stop is located outside of station. Would be helpful to design station and alter bus route to allow for stops at the stations.

? Keep and Add Local Businesses: We want locally owned, culturally diverse, clean businesses in commercial areas with employees who live in Somerville.

? Keep Somerville Affordable: We want to make sure people of all economic means have the ability to afford housing and living costs, so that Somerville residents, such as child care workers, cab drivers, local business employees and others can stay here affordably.

? Maintain Our Diversity: Preserve and encourage economic and ethnic diversity of residents and businesses.

The state needs to plan all transportation projects on the basis of guiding principles for Transit Oriented Develoment (TOD), smart growth and quality of live impacts. For example, TOD and land use are the planning and organizing focus of the South Coast Rail project, but

have been ignored in the Green Line extension planning despite the requirement by the Secretary to address these concerns in the EENF.

ethan gilsdorf
83 josephine ave apt 2
somerville, MA 02144

I-135-001

Please see Comment Letter I-013.

January 7, 2010

RECEIVED

JAN 8 2010

MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-135-001

As owners of a condominium unit at the Glass Factory Condominiums, we are deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station. We are extremely concerned about the property value of our unit, which is located in the rear of the building. We urge you to build an aesthetically pleasing station instead of the eyesore design that has been previously presented. We would like to see parks and with trees and grass so that looking out our condo unit is a pleasurable view. Should you carelessly construct the new station and tracks without minimizing the noise level and not taking into consideration the aesthetics of the project, our property value of our unit will undoubtedly decrease.

We first purchased our unit with the knowledge of the Green Line Lechmere Station being built in the North Point development. We would like to see the station built further away from the Glass Factory instead of n our back yard. Furthermore, developing the Lechmere parking lot is not necessary since this will no longer be the end of the Green Line. Instead of an empty parking lot, we would like to see parks or perhaps guest parking for the Glass Factory.

Please see our following concerns:

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. We urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

MAINTENANCE FACILITY.
We strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however we would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing our concerns.

Sincerely,

Sharman E. Gingrich
Chr F Harris

Sharman E. Gingrich, M.D.
Christopher F. Harris, M.D.
West Newbury, MA 01985

Johnson, Holly (EEA)

From: Philip Goff [philipgoff@hotmail.com]
Sent: Thursday, January 07, 2010 10:38 PM
To: Johnson, Holly S (ENV)
Subject: comments on Green Line extension

Dear MassDOT - thank you so much for accepting my comments regarding the plan to extend the Green Line into the public record.

I am a strong supporter of the extension but would like to make the following comments to Mass DOT:

I-136-001
- The planned alignment should come out to Rt. 16 in the first phase to provide improved transit for residents living in West Medford and East Arlington where I live

I-136-002
- The Community Path extension within the Green Line corridor should be built concurrently with the light rail line. It would make no sense to build the tracks and come in later for the multi-use trail. The trail will not only decrease reliance on vehicle trips for Somerville residents but will increase ridership on the train and reduce the demand for parking near the station areas.

I-136-003
- Include plentiful, secure and covered bike parking at all proposed green line stations. On nice weather days 250-300 bikes are parked at Alewife Station and hundreds more at Davis and Porter squares. This shows a demand for bike parking that is likely to be similar at the green line stations.

I-136-004
- Improve sidewalk, bike lane and trail connections at the stations, especially at the rt. 16 terminus where many transit riders should have a seamless walk or ride from the future paths along the Mystic River or Alewife Brook to the platform.

Thank you so much. I look forward to biking to the Green Line in 2014!

-Phil Goff
94 Grafton Street
Arlington MA 02474

Hotmail: Free, trusted and rich email service. Get it now.

I-136-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-136-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

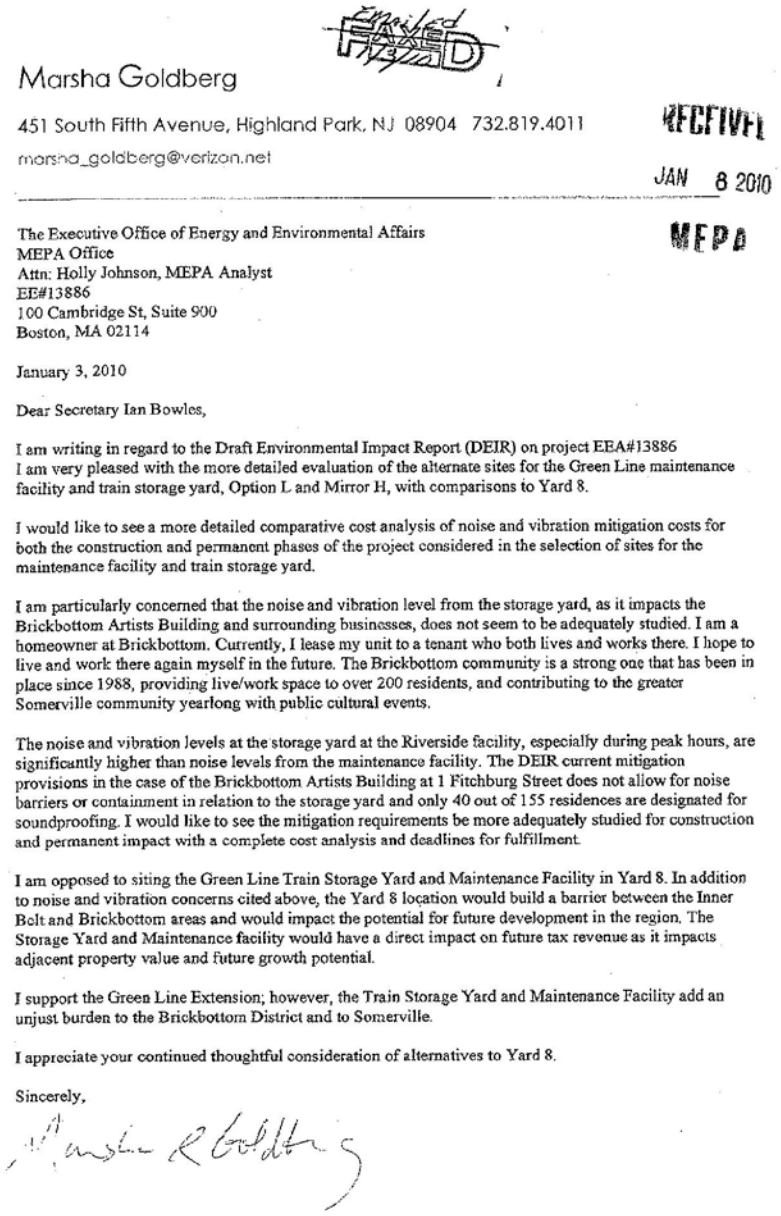
I-136-003

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-136-004

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not

included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



Marsha Goldberg

451 South Fifth Avenue, Highland Park, NJ 08904 732.819.4011

marsha_goldberg@verizon.net

RECEIVED

JAN 8 2010

MEPA

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

January 3, 2010

Dear Secretary Ian Bowles,

I am writing in regard to the Draft Environmental Impact Report (DEIR) on project EEA#13886
I am very pleased with the more detailed evaluation of the alternate sites for the Green Line maintenance facility and train storage yard, Option L and Mirror H, with comparisons to Yard 8.

I-137-001

I would like to see a more detailed comparative cost analysis of noise and vibration mitigation costs for both the construction and permanent phases of the project considered in the selection of sites for the maintenance facility and train storage yard.

I-137-002

I am particularly concerned that the noise and vibration level from the storage yard, as it impacts the Brickbottom Artists Building and surrounding businesses, does not seem to be adequately studied. I am a homeowner at Brickbottom. Currently, I lease my unit to a tenant who both lives and works there. I hope to live and work there again myself in the future. The Brickbottom community is a strong one that has been in place since 1988, providing live/work space to over 200 residents, and contributing to the greater Somerville community yearlong with public cultural events.

The noise and vibration levels at the storage yard at the Riverside facility, especially during peak hours, are significantly higher than noise levels from the maintenance facility. The DEIR current mitigation provisions in the case of the Brickbottom Artists Building at 1 Fitchburg Street does not allow for noise barriers or containment in relation to the storage yard and only 40 out of 155 residences are designated for soundproofing. I would like to see the mitigation requirements be more adequately studied for construction and permanent impact with a complete cost analysis and deadlines for fulfillment.

I-137-003

I am opposed to siting the Green Line Train Storage Yard and Maintenance Facility in Yard 8. In addition to noise and vibration concerns cited above, the Yard 8 location would build a barrier between the Inner Belt and Brickbottom areas and would impact the potential for future development in the region. The Storage Yard and Maintenance facility would have a direct impact on future tax revenue as it impacts adjacent property value and future growth potential.

I support the Green Line Extension; however, the Train Storage Yard and Maintenance Facility add an unjust burden to the Brickbottom District and to Somerville.

I appreciate your continued thoughtful consideration of alternatives to Yard 8.

Sincerely,

I-137-001

FEIR Chapter 2 presents an analysis of noise and vibration impacts for each site alternative. The storage and maintenance facility and its rail approaches will be designed to minimize noise and vibration impacts to neighboring properties and stakeholders. Noise and vibration mitigation measures are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-137-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. An expanded analysis of potential noise and vibration impacts at the Brickbottom Artists Buildings is included in FEIR Chapter 8. These projections take into account the collective impacts of rail uses in the area. During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

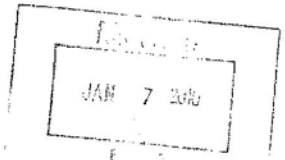
I-137-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter

2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Rex Gonsalves
169 Monsignor O'brien hwy
Apt 204
Cambridge, MA

7th Jan 2010



Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
Dear Secretary Bowles:

I am an owner [apt 204] at the Glass Factory Condominiums. I have the following concerns about the Green Line Extension Project:

I-138-001 Tracks are way too close to the building, Just 30 – 50 feet away. Request the tracks be moved as far back as possible and at least past the current fence behind the building.

Tracks will block light and views, make the elevated track is as slim and visually appealing as possible. Position the supports where they block views the least.

I-138-002 Extreme noise & vibration from trains & busses. The DEIR lists us as SEVERELY IMPACTED. Adequate mitigation may not be possible. The T must do everything it can to reduce impacts. They may need to give us new windows, insulation, etc. since there is not enough space to build a sound barrier wall behind the building.

I-138-003 We strongly oppose putting the new maintenance facility behind our building. We already get noise from the existing BET facility. Putting the Mirror H Option behind our building will effectively destroy any further development in North Point. It is an Inappropriate use for this valuable land. Option L is a better choice.

I-138-004 Noise & light pollution from station lighting, station announcements etc. Lighting should be carefully designed to reduce these impacts.

I-138-005 The proposed station is not of adequate quality for our neighborhood and is totally unacceptable (and an insult). This is a gateway to Cambridge. The station should be an amenity and should be of similar quality to Charles Station. The station is too close to our building (right behind the outdoor parking) and should be moved toward East St.
Not enough green space. Too much parking. Why so much parking when we won't be the end of the line anymore. Reduce surface parking. Hide any parking with trees and other landscaping. The corner of East Street & O'Brien should not be surface parking.

I-138-006 We want the trees to remain behind our buildings, add additional trees as barrier. When we bought we were told the T boundary is the fence lined with trees. These plans put the tracks on the space we thought was our green space and dog walking area. Preserve all existing green space.

I-138-007 Concerns about darkness, crime, smoking, urinating under elevated tracks. We need additional security & new fencing since so many people will cross by our parking areas

I-138-008 Busses should be as far away from the building as possible. We do not want the noise and fumes. Busses must not be allowed to idle. Health concerns: fumes, electric fields, noise, vibrations, smokers outside station. People talking right under our windows.

Sincerely,

Rex Gonsalves
617-240-6655
rg@halstead.com

1

I-138-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-138-002

As described in DEIR/EA Chapter 6, FEIR Chapter 5 (Lechmere Station), and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. FEIR Chapter 8 describes proposed mitigation measures and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-138-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-138-004

Revised conceptual plans for Lechmere Station, including station lighting, are included in FEIR Chapter 5, Lechmere Station. Elements such as lighting and specific station amenities will be addressed during the preliminary engineering stage.

I-138-005

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-138-006

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

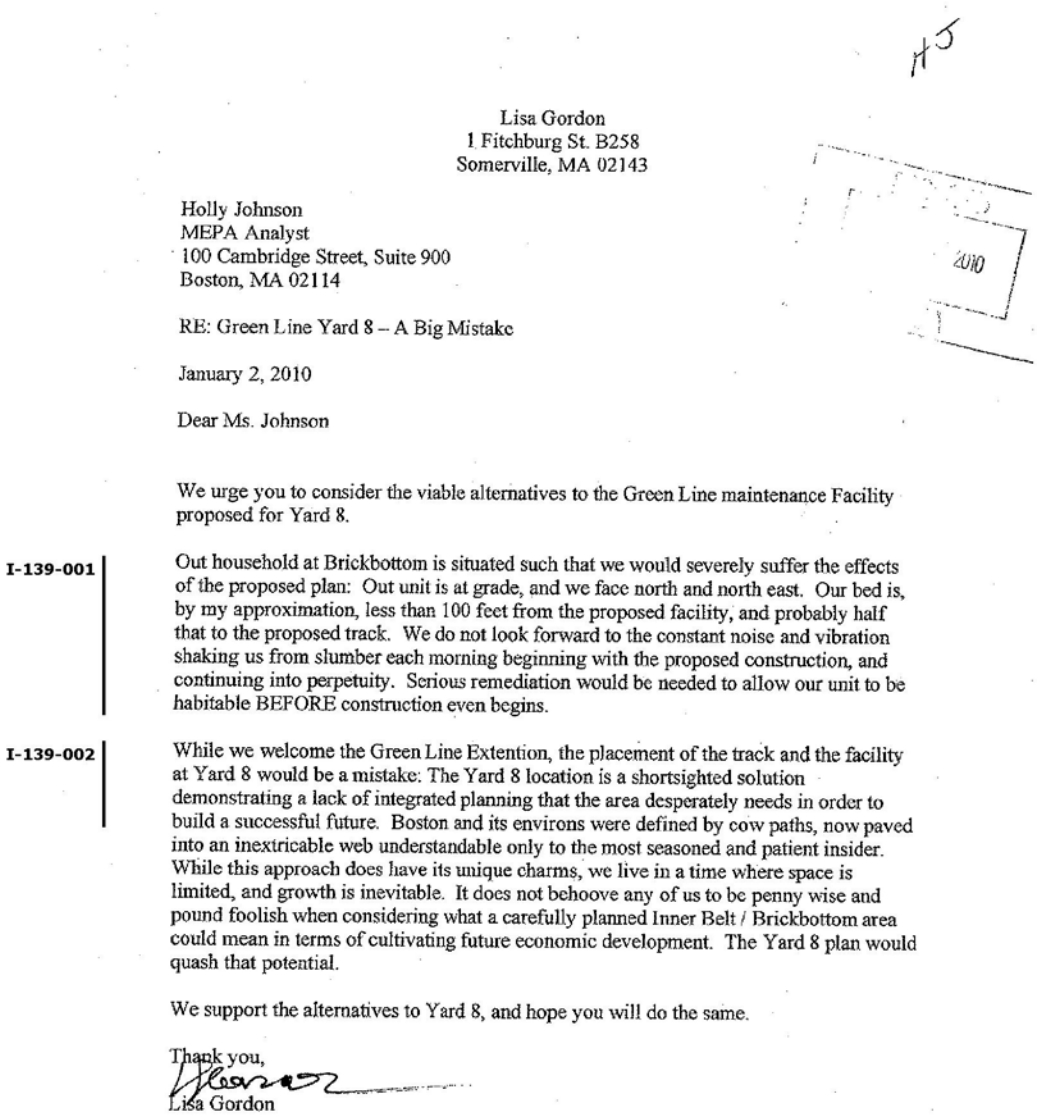
I-138-007

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering phase of the Project, with additional consideration given to urban design and the pedestrian environment under the trackway areas. Along the back side of the Glass Factory, fencing is currently proposed to minimize trespassers crossing the existing Glass Factory parking area and will be further evaluated during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-138-008

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere

Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.



Lisa Gordon
1 Fitchburg St. B258
Somerville, MA 02143

Holly Johnson
MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Yard 8 – A Big Mistake

January 2, 2010

Dear Ms. Johnson

We urge you to consider the viable alternatives to the Green Line maintenance Facility proposed for Yard 8.

I-139-001 Out household at Brickbottom is situated such that we would severely suffer the effects of the proposed plan: Out unit is at grade, and we face north and north east. Our bed is, by my approximation, less than 100 feet from the proposed facility, and probably half that to the proposed track. We do not look forward to the constant noise and vibration shaking us from slumber each morning beginning with the proposed construction, and continuing into perpetuity. Serious remediation would be needed to allow our unit to be habitable BEFORE construction even begins.

I-139-002 While we welcome the Green Line Extention, the placement of the track and the facility at Yard 8 would be a mistake: The Yard 8 location is a shortsighted solution demonstrating a lack of integrated planning that the area desperately needs in order to build a successful future. Boston and its environs were defined by cow paths, now paved into an inextricable web understandable only to the most seasoned and patient insider. While this approach does have its unique charms, we live in a time where space is limited, and growth is inevitable. It does not behoove any of us to be penny wise and pound foolish when considering what a carefully planned Inner Belt / Brickbottom area could mean in terms of cultivating future economic development. The Yard 8 plan would quash that potential.

We support the alternatives to Yard 8, and hope you will do the same.

Thank you,

Lisa Gordon

I-139-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-139-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Gottlieb, Steve (BuyerZone) [sgottlieb@buyerzone.com]
Sent: Monday, January 04, 2010 4:06 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension comment

Hi Holly,

I-140-001

I noted the snippet in the Globe this weekend suggesting that any comments re: the Green Line extension project be directed to you – the article didn't really say what type of comments you were looking for...I've been following the project closely since buying a condo along the proposed extension in 2005 – I have to say that the only real comment I have is that I wonder if this really has any chance whatsoever of being completed on time. It just seems to be moving extremely slowly and I worry about funding with regular news pieces covering the MBTA budget (or lack thereof, ha).

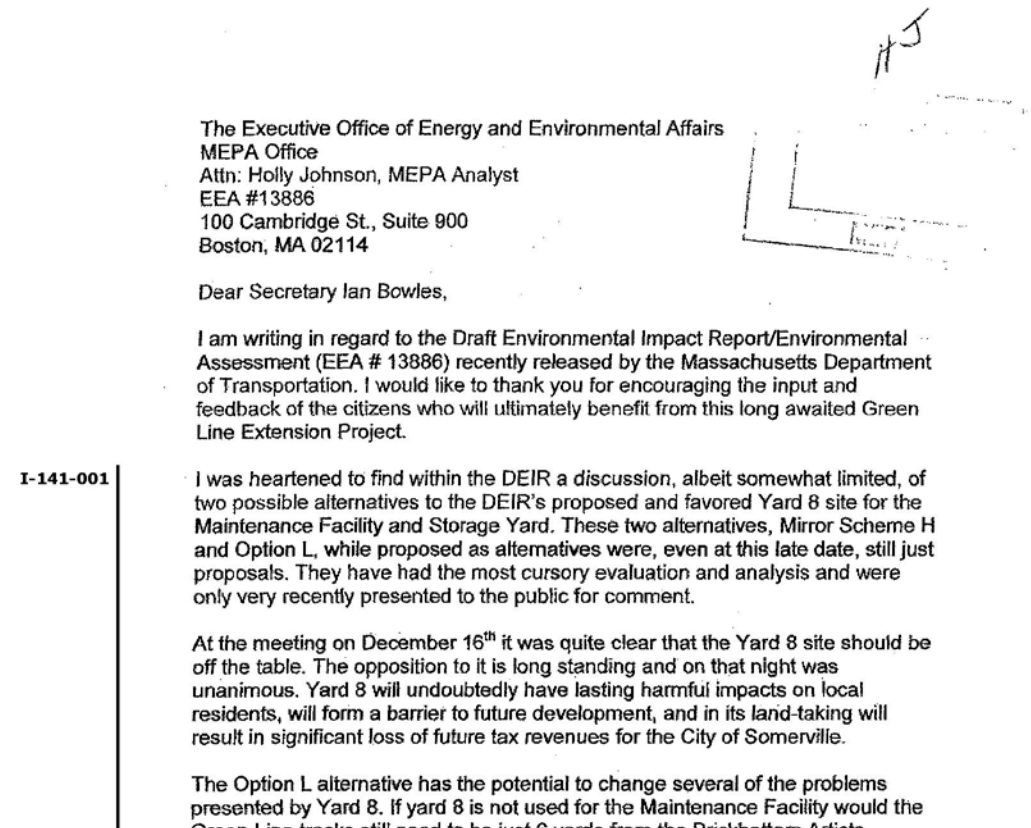
When the Green Line extension comes up in conversation now, most people I know honestly roll their eyes and seem to expect that this thing is going to fall apart completely. Obviously I hope that's not the case – I wonder if a statement or two clarifying that things are on schedule, with an expected completion date, etc would be helpful?

Thanks!
Steve

Steve Gottlieb
325 Lowell Street #2
Somerville, MA 02145
781-608-2757

I-140-001

As described in Section 1.1 of the DEIR/EA, the Proposed Project is anticipated to be completed by December 31, 2014 in compliance with the SIP. MassDOT is continuing to strive to achieve this goal.



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing in regard to the Draft Environmental Impact Report/Environmental Assessment (EEA # 13886) recently released by the Massachusetts Department of Transportation. I would like to thank you for encouraging the input and feedback of the citizens who will ultimately benefit from this long awaited Green Line Extension Project.

I-141-001

I was heartened to find within the DEIR a discussion, albeit somewhat limited, of two possible alternatives to the DEIR's proposed and favored Yard 8 site for the Maintenance Facility and Storage Yard. These two alternatives, Mirror Scheme H and Option L, while proposed as alternatives were, even at this late date, still just proposals. They have had the most cursory evaluation and analysis and were only very recently presented to the public for comment.

At the meeting on December 16th it was quite clear that the Yard 8 site should be off the table. The opposition to it is long standing and on that night was unanimous. Yard 8 will undoubtedly have lasting harmful impacts on local residents, will form a barrier to future development, and in its land-taking will result in significant loss of future tax revenues for the City of Somerville.

The Option L alternative has the potential to change several of the problems presented by Yard 8. If yard 8 is not used for the Maintenance Facility would the Green Line tracks still need to be just 6 yards from the Brickbottom Artists Building? And if the tracks and the Green Line cars were farther away wouldn't it

I-141-002

be easier and less expensive to mitigate the resulting sound and vibration? If we are not going with Yard 8, would it be possible to build the Community Bike Path

I-141-003

closer to the only residence in the area? If we don't spend all that money (and all this time) on Yard 8, the DEIR's "perfect" place for the Maintenance Facility and Storage Yard, and instead build a "good and adequate" maintenance facility at one of the alternative sites would it be possible to extend the Green Line out to Medford (Rt. 16) on this project rather than having those folks wait another 6 years?

We have wasted so much time. This project has been held up for almost two years because of MassDOT's insistence on Yard 8 for its Maintenance Facility and Storage Yard. Please keep the MEPA process open, require the preparation of a Final Environmental Impact Report with more details and specifics, and

I-141-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-141-002

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green

demand that MassDOT prepare complete evaluations and analyses of the Mirror Scheme H and Option L alternatives.

The point of this project is to favorably impact our environment by cutting down on automobile traffic and encouraging use of public transit. Putting the maintenance Facility and Storage Yard at Yard 8 flies in the face of environmentally improving and positively developing this last piece of Somerville land.

Sincerely,

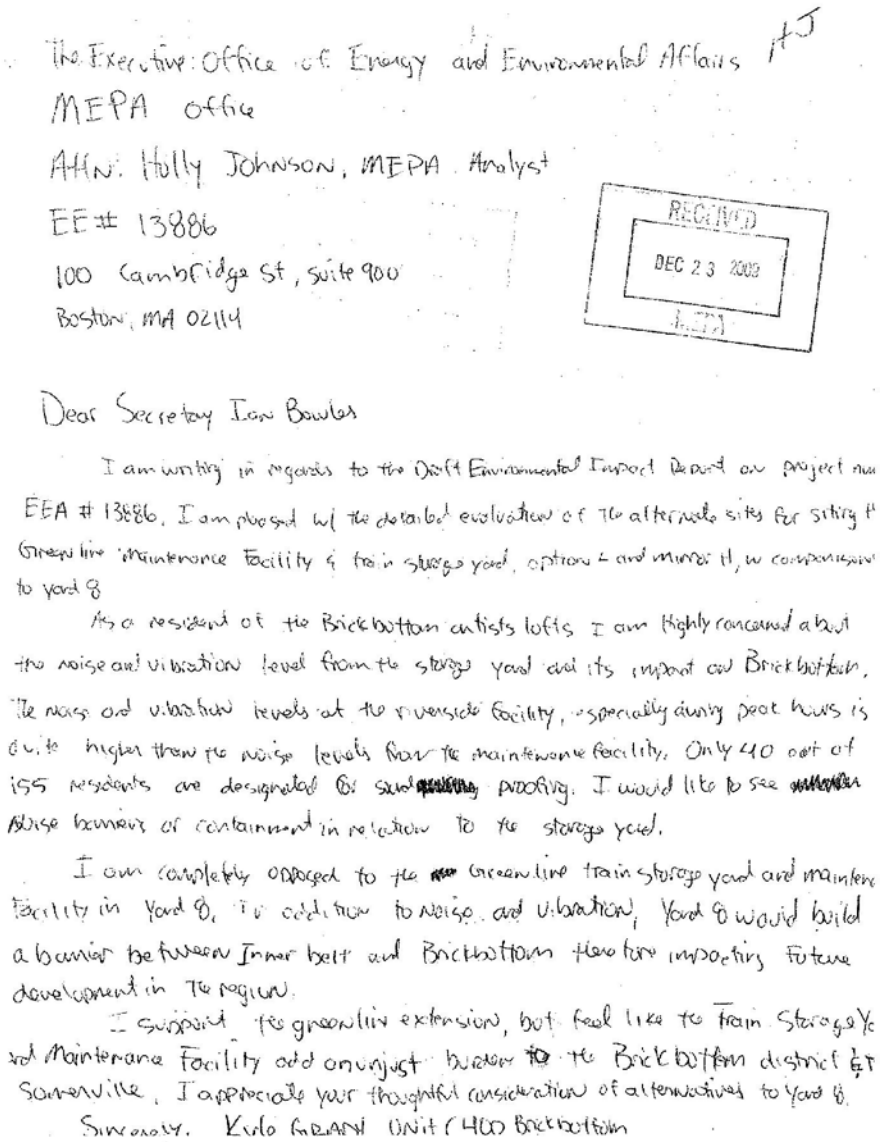


Linda M. Goulet
1 Fitchburg St. C-301
Somer. MA 02143

Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-141-003

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.



The Executive Office of Energy and Environmental Affairs HJ
MEPA office
Attn: Holly Johnson, MEPA Analyst
EE# 13886
100 Cambridge St, suite 900
Boston, MA 02114

RECEIVED
DEC 23 2009
MEPA

Dear Secretary Ian Bowles

I am writing in regards to the Draft Environmental Impact Report on project num EEA # 13886. I am pleased w/ the detailed evaluation of the alternate sites for siting the Green line Maintenance Facility & train storage yard, option L and mirror H, w comparison to yard 8

I-142-001 As a resident of the Brickbottom artists lofts I am highly concerned about the noise and vibration level from the storage yard and its impact on Brickbottom. The noise and vibration levels at the riverside facility, especially during peak hours is

I-142-002 quite higher than the noise levels from the maintenance facility. Only 40 out of 155 residents are designated for sound proofing. I would like to see noise barriers or containment in relation to the storage yard.

I-142-003 I am completely opposed to the Green line train storage yard and maintenance facility in Yard 8. In addition to noise and vibration, Yard 8 would build a barrier between Inner belt and Brickbottom therefore impacting future development in the region.

I support the greenline extension, but feel like the Train Storage Yard and Maintenance Facility add an unjust burden to the Brickbottom district & Somerville. I appreciate your thoughtful consideration of alternatives to Yard 8.

Sincerely, Kyle Grant Unit C400 Brickbottom

I-142-001

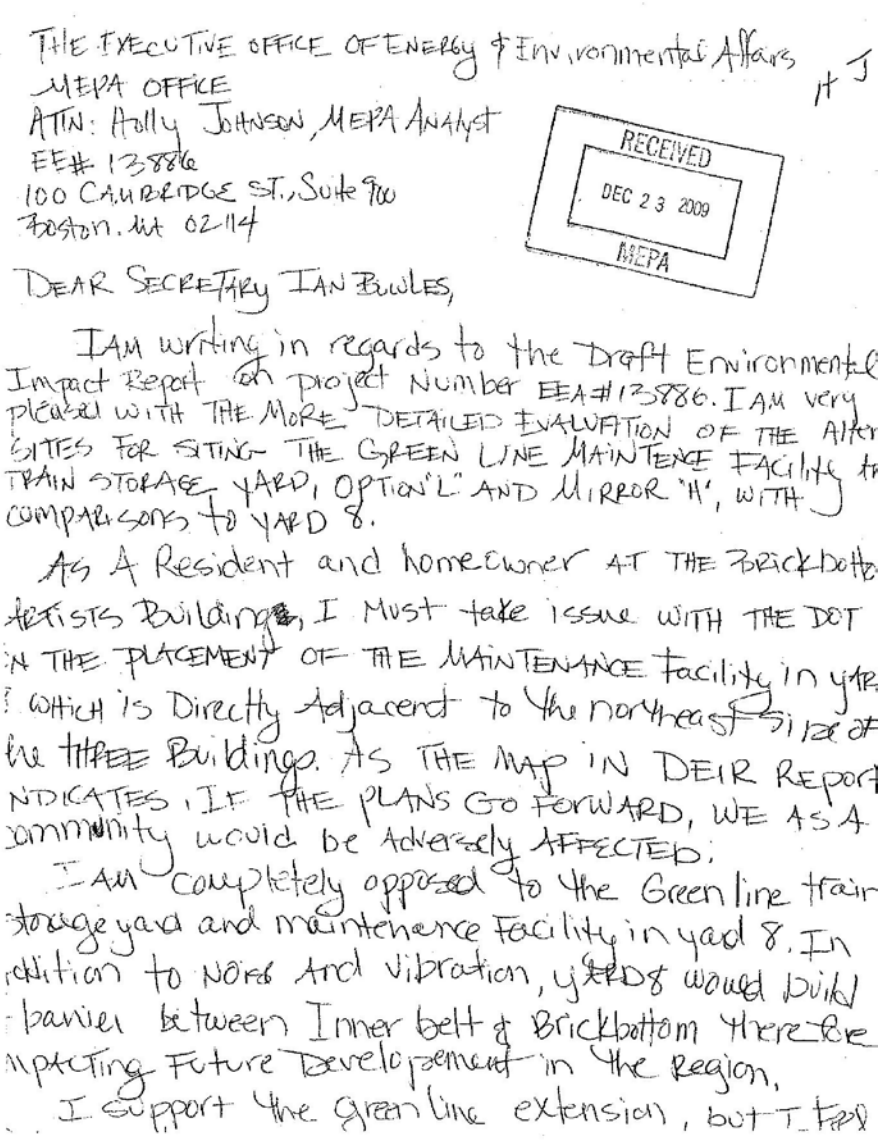
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-142-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-142-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



THE EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
MEPA OFFICE
ATTN: Holly Johnson, MEPA Analyst
EEA# 13886
100 CAMBRIDGE ST., Suite 900
Boston, MA 02114

RECEIVED
DEC 23 2009
MEPA

DEAR SECRETARY IAN BOWLES,

I AM writing in regards to the Draft Environmental Impact Report on project Number EEA#13886. I AM very pleased with THE MORE DETAILED EVALUATION OF THE Alter SITES FOR SITING THE GREEN LINE MAINTENCE FACILITY & TRAIN STORAGE YARD, OPTION "L" AND MIRROR "H", WITH COMPARISONS TO YARD 8.

I-143-001

As A Resident and homeowner AT THE BRICKBOTTOM ARTISTS BUILDING, I MUST take issue WITH THE DOT IN THE PLACEMENT OF THE MAINTENANCE facility in yard WHICH is Directly Adjacent to the northeast side of the three Buildings. AS THE MAP IN DEIR REPORT INDICATES, IF THE PLANS GO FORWARD, WE AS A community would be Adversely AFFECTED.

I AM completely opposed to the Green line train storage yard and maintenance facility in yard 8. In addition to Noise And Vibration, yard 8 would build barrier between Inner belt & Brickbottom therefore impacting Future Development in the Region.

I support the Green line extension, but I feel

I-143-001

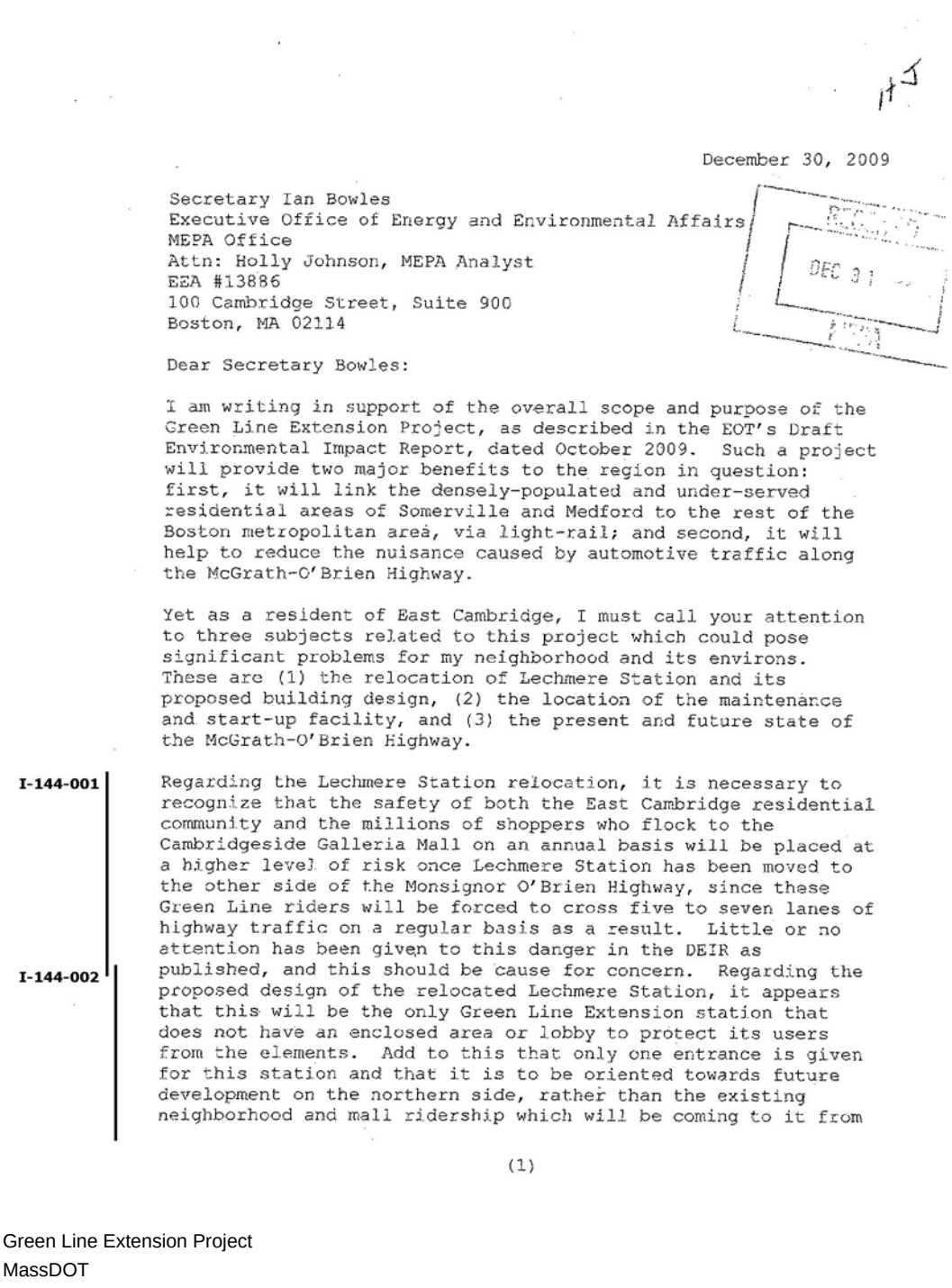
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Facility ADD an unjust burden to the Brick bottom District, and to Somerville

I appreciat your thoughtful consideration of alternatives to yard 8.

Thank you for your time,

Lauren Grady Unit C40



December 30, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing in support of the overall scope and purpose of the Green Line Extension Project, as described in the EOT's Draft Environmental Impact Report, dated October 2009. Such a project will provide two major benefits to the region in question: first, it will link the densely-populated and under-served residential areas of Somerville and Medford to the rest of the Boston metropolitan area, via light-rail; and second, it will help to reduce the nuisance caused by automotive traffic along the McGrath-O'Brien Highway.

Yet as a resident of East Cambridge, I must call your attention to three subjects related to this project which could pose significant problems for my neighborhood and its environs. These are (1) the relocation of Lechmere Station and its proposed building design, (2) the location of the maintenance and start-up facility, and (3) the present and future state of the McGrath-O'Brien Highway.

I-144-001 Regarding the Lechmere Station relocation, it is necessary to recognize that the safety of both the East Cambridge residential community and the millions of shoppers who flock to the Cambridgeside Galleria Mall on an annual basis will be placed at a higher level of risk once Lechmere Station has been moved to the other side of the Monsignor O'Brien Highway, since these Green Line riders will be forced to cross five to seven lanes of highway traffic on a regular basis as a result. Little or no attention has been given to this danger in the DEIR as published, and this should be cause for concern. Regarding the

I-144-002 proposed design of the relocated Lechmere Station, it appears that this will be the only Green Line Extension station that does not have an enclosed area or lobby to protect its users from the elements. Add to this that only one entrance is given for this station and that it is to be oriented towards future development on the northern side, rather than the existing neighborhood and mall ridership which will be coming to it from

(1)

I-144-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-144-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-144-002

I-144-003

the south. And finally, there is the inclusion of two parking lots next to the station, which is unusual since this station is not intended to be a terminus and no other Green Line Extension station seems to require parking lots. Prior to this observation, my understanding has always been that the chief intention of the Green Line Extension was to discourage automobile usage.

I-144-004

Concerning the location of the maintenance and start-up facility, the report states that Yard 8, in East Somerville, is the preferred location. Yet given that the ideal location for a maintenance and start-up facility would be at the terminus, it seems odd to be locating it in the middle of the line like this. Furthermore, the Yard 8 location will have a negative impact upon neighboring Brickbottom residents, as well as future Inner Belt development desired by Somerville. Similarly, the Mirror H alternative appears almost as detrimental, since it promises to encroach upon the residents of the Glassworks Factory, as well as future North Point development desired by Cambridge. Out of the three potential sites accepted by the report, the least noxious for all parties involved would appear to be Option L--which has the added benefit of not requiring right-of-way track when a given train needs to change directions in starting up.

I-144-005

But to reiterate, it still seems far wiser to eliminate the wastefulness of dead-heading trains at the start and end of each day by locating this facility at the terminus, or, failing this, to at least make better use of the already existing Boston Engine Terminal by locating the facility there instead--this latter possibility having the added advantage of prompting the South Shore commuter rail trains to be more properly housed on the South Shore, as well as minimizing a recent tendency to transform unused areas of the BET into adult entertainment dens.

I-144-006

With reference to the present and future state of the McGrath-O'Brien Highway, perhaps the ultimate oversight of this report has been to ignore this highway's inevitable reformation. For in order to achieve what the residents of both East Cambridge and East Somerville truly desire in this regard--which is nothing less than the reduction of this largely elevated highway to a boulevard located at grade--it becomes necessary to sink the heavy- and light-rail associated with this area below ground. In this way, some of the problems mentioned above also begin to resolve themselves: crossing the Monsignor O'Brien Highway relative to the Lechmere Station relocation will no longer pose such a threat, and the future development and interconnectedness of the North Point and Inner Belt areas, desired by the Cities of Cambridge and Somerville, can be

(2)

I-144-003

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-144-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-144-005

The Boston Engine Terminal (BET) and major modifications to its operations are beyond the scope of the Green Line Extension Project. MassDOT will continue to coordinate with the MBTA to explore possibilities for shared facilities between the Green Line Extension storage and maintenance facility and the BET.

I-144-006

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-144-006

brought to closer fruition. Instead, what this report almost guarantees is that the McGrath-O'Brien Highway will continue to lumber about like a brontosaurus in our midst; and as a result, a great opportunity would appear to have been lost by our not addressing this highway in tandem with the Green Line Extension as proposed. This seems especially unfortunate given that both the McGrath-O'Brien Highway and the Green Line Extension have recently come under the collective auspices of MassDOT.

In conclusion, I wish to state that the above problems have been deemed so serious that a number of us from a local neighborhood organization, the East Cambridge Planning Team, have met on several occasions over the past seven months to arrive at what we feel is a better plan for the Lechmere Square area than what

I-144-007

the EOT (now MassDOT) is proposing in this report. In essence, our plan calls for a relocated Lechmere Station with an interior lobby and an additional entrance oriented towards both the traditional East Cambridge residential quarter and the Cambridgeside Galleria Mall; the reduction of the Monsignor O'Brien Highway to a five-lane pedestrian crossing at the First

I-144-008

Street intersection; and the preservation and redevelopment of the old Lechmere Station structures (which have been recommended for eligibility to the National Register of historic places) into a year-round covered market and public square, which would then be bordered by two developable building parcels matching the PUD as previously agreed upon.

Yours most truly,

Alan Greene

Alan Greene
82 Fifth Street
Cambridge, MA 02141

I-144-007

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-144-008

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

LATE COMMENT

Gabrielle Rossmer Gropman
155 Allston Street
Medford, MA 02155
gjrossmer@gmail.com

RECEIVED

JAN 12 2010

MEPA

January 3, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles and Ms. Johnson:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-145-001

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

It is encouraging that the DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

However the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

I-145-002

For the following reasons, **I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT**:
1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.
The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

There are many, many problems with the Phase II approach, including:

- Risk. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- Terminus Impact. Without a Route 16 Station, the College Avenue stop (designed

I-145-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-145-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

I-145-003 • Cost. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

• Project Management. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

I-145-004 • Environmental Justice: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

I-145-005 • Legal Mandate: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

I-145-006 2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

I-145-007 3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings.

MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you for your consideration.

Gabrielle Rossmer Gropman

I-145-003

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-145-004

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-145-005

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-145-006

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR

Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-145-007

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: alice grossman [aliceag@rcn.com]
Sent: Friday, January 08, 2010 12:37 PM
To: Johnson, Holly S (ENV)
Subject: Somerville Community Path

Dear Secretary Ian Bowles,

I-146-001

I support the extension of the Green Line to Somerville and Medford and the design of the Community Path. I feel that the DEIR should clearly state that the Community Path will be designed by MASSDOT's contractors as agreed in a Feb. letter from the former EOT. The Green Line and the Community Path Extension should be considered as one project to save money and insure their construction. This must be clearly described by the MassDOT. MassDOT should commit to get funding for this most necessary work! So many people in the community have been waiting too longer for better opportunities for public transportation and alternative transport.

Thank you for considering these comments.
Alice Grossman

http://www.alicegrossman.com

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I-146-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: Bathsheba [b@bathsheba.com]
Sent: Thursday, January 07, 2010 5:27 AM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Draft EIR (EEA #13886)

This letter is to Secretary Ian Bowles, Executive Office of Energy and Environmental Affairs
MEPA office

As a new homeowner two blocks from the proposed Gilman Square station, I support the Green Line extension to Somerville and Medford.

I-147-001

I'd add that the DEIR should be explicit in ensuring that the Somerville Community Path is extended. The portion of this path which exists already is heavily used, working beautifully as both parkspace and green transitway. What's not to like? These paths are the best values in infrastructure that a city can buy.

Therefore the DEIR should state that the Community Path extension will be designed by MassDOT's contractors as agreed to in the February 24, 2009 letter from the former EOT.

It should also say that the Green Line and Community Path extensions will be constructed as one project, since it doesn't make any sense to do them separately, and MassDOT must describe them as such.

Lastly, it should say that MassDOT must commit to obtain funding to build the Community Path extension as part of the Green Line extension. (This was done with the Linear Park as part of the Red Line, and it was incredibly successful: it's a major selling point for nearby properties and the neighorhood in general.) MassDOT must work with City, State and Federal agencies to secure this funding, including applying for Federal New Starts funding that allows bicycle and pedestrian access costs.

Thanks for considering these comments!

Best regards,

-Bathsheba
--
Bathsheba Grossman
Sculpting Geometry
Crystal Proteins

Bathsheba Sculpture LLC
http://bathsheba.com
http://crystalprotein.com

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I-147-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: Bathsheba [b@bathsheba.com]
Sent: Sunday, January 03, 2010 7:54 PM
To: Johnson, Holly S (ENV)
Subject: Public comments on the Green Line Extension DEIR

I-148-001

Please build it! We need it. And the bike path too.

Just bought a house a block from the Gilman Square station, and I can't wait.

Thanks,

-Bathsheba
--
Bathsheba Grossman
Sculpting Geometry
Crystal Proteins

Bathsheba Sculpture LLC
http://bathsheba.com
http://crystalprotein.com

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I-148-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Johnson, Holly (EEA)

From: Lois Grossman [lgrossm2@gmail.com]
Sent: Saturday, January 02, 2010 10:27 AM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I have been participating actively in the above issue because of the efforts of the Medford Green Line Extension Neighborhood Alliance to keep local residents informed and interested. I have just read through several documents relating to the DEIR and wish to submit comments on the project. Although there are many important issues here, the ones that concern me the most are these:

I-149-001

1) Submitting a DEIR for a project that does not include a no-parking Route 16 terminus is a self-defeating gesture on the part of the MDOT. All the information so far considered makes it clear that the no-parking Route 16 terminus does the most to mitigate environmental concerns, to serve the Environmental Justice community, and to reach the largest ridership. Submitting a DEIR that stipulates that such a terminus would be built "later" is almost a guarantee it will never be built. As I understand it, the DEIR as presently written does not even present the best possible scenario for the Route 16 station. In my opinion, such a document cannot and should not be accepted as final. The managers must go back to the drawing board and rethink the station and then submit a revised DEIR. There is a serious risk that accepting a defective DEIR will seal the doom of the proposed future completion. As you certainly comprehend, once the DEIR is accepted it will take on a weight and inertia that will be hard to move.

I-149-002

2) Making College Avenue a terminus, even temporarily, is not going to solve many of the problems that extension is designed to solve and it will create new ones. It cannot possibly attract the numbers of riders that would achieve the desired environmental mitigation. It is close to the Red Line and is served by two bus lines and a Tufts shuttle bus service already. College Avenue is already a traffic disaster. Making it a terminus can only exacerbate the situation.

3) No matter how the project is realized, it is going to be very disruptive for everyone in the area between now and 2014. Renewing that disruption to expand to Route 16 at a later date is an unnecessary torture. If it's all done at once the disruption will be minimized rather than maximized.

4) Seeking funding for a later phase by no means assures that it will be found. If it costs an additional $50 million now, it will surely cost twice that 6 years from now.

5) The Medford Green Line Extension Neighborhood Alliance has submitted alternative plans for the Route 16

I-149-001

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-149-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

terminus which coincide in large measure with alternatives the DOT is considering but has NOT included in the DEIR. There are some cost-saving measures that will help close the gap in funding. I believe that it is incumbent on you to see that the DEIR that becomes final is the best possible version, which is not the case with the draft now before you.

As a citizen, I ask you to send the plan back to the DOT. Please do not accept it in its present form.

Sincerely

Lois Grossman
33 West Street
Medford, MA 02155

Johnson, Holly (EEA)

From: Tony & Bert G. [ding71344@verizon.net]
Sent: Friday, December 04, 2009 9:38 AM
To: Johnson, Holly S (ENV)
Subject: Ball Square Greenline Extention concerns

My name is Anthony R. Guarciariello. My sister, Benice Costanzo, and I own a triple decker located on Boston Avenue. It is the last residential apartment house on the east side of Boston Avenue before Broadway and Ball Square or about 120 yards from Broadway. The railroad tracks are about 60 yds west of the front of the house.

I-150-001

We attended the November 18th informational meeting at Somerville High School and one item that we brought up with one of your consultants there was the issue of parking problems on that section of Boston Avenue after the new station is built.

The vast majority of the complaints we hear from our tenants is the lack of parking spaces on the street. There is only one-side parking now permitted on this section of Boston Ave. and the off-street parking is minimal at these turn-of-the-century buildings. I read in your proposal that increased enforcement by the local police would be necessary but the only restriction that exists now to 24-hr street parking is street-sweeping on Fridays and, of course, snow emergencies. There is no residential-only parking restriction.

The increased traffic that will ensue is another concern that has been voiced by our tenants. Backing out of the narrow driveway at our building is a dangerous proposition now.

Comments?

I-150-001

DEIR/EA Table 6-1, Project Mitigation Commitments, lists the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination.

The additional traffic expected to be generated by the project (related to pick-up and drop-off activity) is minimal. A review of the traffic volume networks in the DEIR/EA shows an increase of less than 50 trips during the peak hours along Boston Avenue. This equates to less than one additional vehicle per minute.

Johnson, Holly (EEA)

From: Kevin Guiney [guiney@fas.harvard.edu]
Sent: Friday, January 08, 2010 2:36 PM
To: Johnson, Holly S (ENV)
Subject: RE: Green Line Extension Draft EIR (EEA #13886)

> To:
> Secretary Ian
> Bowles
>
> January 7, 2010 Executive Office of Energy and Environmental Affairs
> MEPA Office
> Attn:
> Holly Johnson (holly.s.johnson@state.ma.us) 100 Cambridge Street,
> Suite 900 Boston, MA 02114
>
>
> RE: Green
> Line Extension Draft EIR (EEA #13886)
>
>
>
> Dear
> Secretary Bowles:
>
I-151-001 > I am writing on behalf of the Friends of the Community Path, a local
> community group with over 2,000 supporters of the existing and
> proposed Somerville Community Path. We strongly support the
> construction of the Green Line Extension to Route 16 on the
> Medford/Somerville line and to Union Square in Somerville and believe
> in its positive economic and environmental impacts.
>
> However, because of shortcomings and omissions in the design, we
> cannot support this Massachusetts Department of Transportation
> (MassDOT) Draft Environmental Impact Statement (DEIR) becoming the
> Final EIR, unless a Supplemental EIR or Addendum is performed to
> correct the deficiencies.
>
> We urge you to:
> 1) Request that MassDOT incorporate the revisions outlined below
> into the EIR and the subsequent final design
> 2) Request that MassDOT seek state and federal funding for the
> Community Path extension as an integral part of the Green Line
> Extension
> 3) ensure that a Citizens Advisory Committee public process be
> instituted to help guide these necessary design improvements.
>
> Although a 10% design stage cannot contain all the details everyone
> would like, now is the time to ensure that the Community Path
> extension is incorporated into the final EIR and the subsequent final
> design. Notably, the Community Path is good for the Green Line, and
> the Green Line is good for the Community Path. There are many local
> and national examples of successful rail- and-path projects (a few are
> cited near the end of this letter), and now is the right time to
> garner state and federal funding for such projects.

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I-151-001

Please see Comment Letter I-081 for responses to this form letter.

> The Somerville Community Path (also known regionally as an extension
> of the Minuteman Trail) provides the logical connection to the City's
> neighbors to the east and west. Every improvement to the Community
> Path extension in its co-design with the Green Line extension
> maximizes the potential of our regional transportation resources.
>
> We appreciate your consideration of these revisions to both the EIR
> and the subsequent final design:
>
> REVISIONS TO Funding
> and Construction(followed by details):
> · The
> DEIR should clearly state that the extension of the Community Path
> will be designed by MassDOT's contractors as agreed to in a February
> 24,
> 2009 letter
> from the EOT.
> · That
> to take full advantage of cost efficiencies and technical necessities,
> the Green Line and Community Path extensions will be funded and
> constructed together as a single project and must clearly be described
> as such by MassDOT.
> · MassDOT
> should commit to work with the City of Somerville and other State and
> Federal agencies to obtain the necessary funding to build the
> Community Path extension as an integral part of the Green Line
> extensions - as was done with Boston's 4.7mile long Southwest Corridor
> path as part of the Orange Line, and with the mile-long Linear Park as
> part of the Red Line from Davis Square to
> Alewife. (By comparison, the
> Community Path extension is about 2.5 miles.) Applications for
> funding should include Federal New Starts funding for allowed bicycle
> and pedestrian access costs
> · As
> the location of the support facility is finalized, the route of the
> Community Path from Washington St. to Lechmere in Cambridge should be
> re- evaluated.
>
> Details
>
> Funding and the Importance of the Community Path extension - By
> acquiring federal funding for the Community Path in conjunction with
> the Green Line extension, both transit projects will benefit
> tremendously, with the added perk of creating additional design and
> construction jobs in the Commonwealth. By contrast, if funding for
> both transit projects is not sought concurrently, it will cost many
> times more to construct the Community Path as a separate project, in
> turn yielding the grim possibility that the Community Path extension
> may never get built.
> We understand that the City of Somerville has about $3 million of the
> reportedly $15 - $20 million Community Path extension estimated cost.
>
>
> The request for State and Federal transit funding is reasonable and
> appropriate, as follows:
>

> · The
> Federal Transportation Act (FTA) has recently proposed a policy that
> "pedestrian improvements located within 1/2 mile and all bicycle
> improvements located 3 miles of a public transportation stop … may be
> eligible for FTA funding"
> http://edocket.access.gpo.gov/2009/E9-27240.htm
> · The
> Community Path - a mere 2 miles from Boston at it's current Cedar
> Street terminus - will provide desirable off-road bicycle and
> pedestrian access to the T stations, offering superior connections to
> the surround neighborhoods, especially in East Somerville - as in
> Davis Square, where 60% of the residents use public transportation and
> thousands walk and bike to the station each
> day. The Community Path
> will attract more T-riders in a very cost-effective manner. More T-
> riders means enhanced opportunities for getting federal New Starts and
> other federal funding.
> · In
> the vicinity of Lowell St., Gilman Sq. and Washington St. stations,
> the Community Path is designed as an integral part of the station
> access. This will allow the public transportation success of the
> Davis Square station to be repeated in parts of Somerville that really
> need it.
>
> REVISIONS TO DESIGN
>
> Community Path from Lowell St. to Route 16: The MEPA
> certificate said that the environmental review would include
> evaluation of
> continuing the Community Path west of the Lowell St. station to
> Medford. The
> study results that were presented (Appendix E of the DEIR) concluded
> that the
> width of certain sections right-of-way was insufficient to provide
> such a
> continuous Path. However, since there are some sections where there
> isenough width, a route, path connections to local
> streets, can be studied further.
>
> Community Path from Route 16 to West Medford: Section
> 3.2.3 of the RFP said that Vanasse Hangen
> Brustlin, Inc. (MassDOT / EOT's consultant)should study "Using the
> bikeway/pathway
> guidelines, consider options for providing pedestrian connections to
> the West
> Medford commuter rail station and evaluate the viability and
> potential impacts
> of including a community path in this section of the project area."
> This
> seems not to have been done but should be. Such a Path would make a
> transfer
> connection from Route 16 to West Medford. Therefore MassDOT should
> plan for a
> community path to connect the Route 16 terminus to West Medford via
> an overpass
> of Route 16, a bridge over the Mystic River and a route along the
> Lowell

> commuter rail tracks.
>
> Access to Route 16 Station - The plans in the DEIR
> document do not show how Green Line riders will safely access the
> Route 16
> station from Arlington and Medford and from the Alewife Brook paths
> that are
> being improved as part of a $3.6 million ARRA stimulus project. A
> multi-use
> path for pedestrians and bicyclists to the station should be
> included in the
> design from the Alewife paths to the station. Please request that
> MassDOT
> perform this design.
>
> Community Path Route from Washington St. to Lechmere - the
> Somerville Community Path route should connect the Washington
> St./Brickbottom station, the Brickbottom community and Inner Belt to
> Lechmere.
> The present plans do not make these connections. If the proposed
> Yard 8
> location for maintenance and storage facility is "dropped", better
> routes for
> the Community Path (such as along the Green Line to Brickbottom and
> over the
> former Red Bridge location) that do make these connections are
> possible. The
> Green Line extension plans should state that this re-evaluation will
> be done.
>
> Bicycle Parking
> · The amount of bicycle parking presently described in
> the plans (270 spaces) is welcome but will be insufficient for the
> expected
> number of bicyclist coming to the stations. 270 spaces is only about
> 1% of the
> expected ridership. Based on the
> present parking at Red line stations, bike parking at 3-5% of
> ridership will
> soon be needed. Therefore, we request that the amount of bike
> parking be
> increased to approximately 5% at the Union Square, Route 16 and
> Lowell St.
> (major intersection with Community Path) stations and 3% at the
> remainder.
> · Also, the location of the bicycle parking (where
> specifically shown in the plans) are good at some locations but not
> at others.
> The bicycle parking locations should be as close to as possible to
> the entrance
> and in well lit and safe locations.
> · Lastly, bicycle parking should be covered parking if at
> possible.
>
> Improved pedestrian and bicycle
> access
> Pedestrian connections to some of

> the stations could be better designed. Access to some of the
> stations could be vastly improved by having more
> thanone entrance or access pointsuch as:
>
> · a
> direct connection from the Gilman Square station to the Somerville
> High
> School/Library/City Hall complex)
>
> · the
> Washington St. station design which seems particularly poor in this
> regard for
> riders coming from the west and north. This could be greatly
> improved by
> locating the station directly above Washington St. where direct
> access via
> elevator would be possible (earlier designs included such a layout).
>
> · In
> general, pedestrian and bicycle access should be given higher
> priority in these
> "community-based" station designs that motor vehicles connections.
>
> · station
> designs (specifically College Ave and also Washington St.), where
> drop-off
> stops ("kiss and ride"), directly blocks the front of the T-station
> entrance
> and will congest entrance to the station. Paradoxically, pedestrian
> access to the station entails a long,
> complicated route.
>
> · Lowell St. station, where a direct connection to the
> platform from the Path coming from Cedar St. would be possible via a
> safe
> pedestrian crossing of one track. MassDOT has said this would not be
> allowed because
> of safety concerns even though every light rail system in the US
> (including in
> Boston: Longwood stop on the Green Line and Milton and Butler stops
> on the
> Mattapan line) allows crossing of tracks for access. Even if
> MassDOT will not allow this access point at this
> time, the Lowell St. station platform should be designed for such
> future
> access.
>
> We look forward to seeing these revisions incorporated into
> the FIR and the subsequent final design.
>
>
> Here are just a few local and national precedents for
> successful rail-with path projects:
>
> PRECEDENTS FOR RAIL-WITH-PATH
> PROJECTS
> There are at least two precedents

> in the Boston area for rail transit with community paths with both
> constructed
> by MBTA and funded with state and federal funding:
> Ø The
> Linear Path over the Red Line Paths with the Red and Orange line
> extensions
> that were part of the overall transit construction project
> Ø The
> Southwest Corridor Path in Boston alongside and over the Orange Line
>
> Additionally, there are many recent examples of paths being
> built together with mass transit expansions around the nation:
> · The
> Capital Crescent trail alongside the planned light-rail Purple Line
> in suburban
> Washington DC includes trail construction is part of the project and
> the cost
> estimates that will be submitted for New Starts funding from the
> federal
> government.
> http://purplelinemd.com/images/stories/purpleline_documents/deis/deis/10_chapter5.pdf
>
http://purplelinemd.com/images/stories/purpleline_documents/deis/Conceptual%20Plans%2009%202
08.pdf
> · Bicycle
> and pedestrian path alongside the light-rail Expo line in Los Angeles:
> http://buildexpo.org/gallery.php
> http://metro.net/projects_programs/exposition/feis.htm
> · A
> world-class bikeway was built alongside and integrated with stations
> on the
> 14-mile Orange Line BRT corridor in LA:
> http://www.streetfilms.org/las-orange-line-bus-rapid-transit-plus-bike-path/
>
> The Somerville Community Path is a critical piece of the
> following regional and State-wide bicycle and greenway plans.
> Ø The
> Massachusetts Bicycle Transportation Plan (page 30 and 45 and Figure
> 4):
http://www.massbikeplan.org/_docs/Massachusetts%20Bicycle%20Plan%20with%20Links%20to%20Graph
cs.pdf
> Ø The
> Somerville Community Path as part of the critical 104-mile east-west
> Mass
> Central Rail Trail (Figures 4.1 and 4.2):http://www.masscentralrailtrail.org/
> Ø The
> City of Somerville's Open Space and Recreation plans list the
> Community Path
> Ø The Mystic Valley Case Statement for Active
> Transportation for the Mystic River Communities:
http://www.railstotrails.org/resources/documents/whatwedo/case_statements/Vision%20for%20Jul
%2010th%20draft.pdf
> Ø The
> 2007 MAPC Regional Bicycle Plan -
http://www.mapc.org/transportation/trans_alternatives/Bike_plan_PDFs/Bike_Plan_FINAL_versior
3-14-07.pdf
>

> In summary, we encourage you to:1) request that MassDOT incorporate
> these revisions into
> the EIR and the subsequent final design, 2)request thatMassDOT seek
> federal funding for the Community Path extension as an
> integral part of the Green Line Extension, and 3) ensure that
> Citizens a
> Advisory Committee public process be instituted to help guide these
> necessary
> design improvements. These crucial
> revisions relating to the Community Path as it is co-designed with
> the Green
> Line extension will help bring our regional transportation resources
> closer to
> their full potential.
>
> Thank you.
>
Kevin Guiney

Johnson, Holly (EEA)

From: Melissa Glenn Haber [glenhaber@rcn.com]
Sent: Thursday, January 07, 2010 9:57 PM
To: Johnson, Holly S (ENV)
Subject: Support for Community Path/Green Line extension linkage

Dear Ms. Johnson,

I-152-001

I am writing to express my thanks to the DOT for the work you've done on the Green Line Extension to Somerville and Medford. As a carless resident of Somerville, and one who believes that public transportation and bike paths are essential to the Commonwealth's future, I want to urge the Commonwealth to proceed with the project in ways that maximize flexibility for the future (such as putting the Union Square stop in a place it might be able to extend to Porter in the future) and in ways that ensure the construction of the bike path. Bus-riders like me already have a way to get to Lechmere, but the extension of the bike path wi provide a healthy and low-emission option for Somerville commuters. I hope the DOT will make sure the Green Line and Community Path extensions will be considered as one project, and that the Community Path will be designed by MassDot's contractors (as I gather was the agreement last February).

Thank you so much,

Melissa Glenn Haber
Somerville

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I-152-001

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able at this point to commit to funding the construction of the Community Path.

Johnson, Holly (EEA)

From: Dan Hamalainen [hamalainen@yahoo.com]
Sent: Friday, January 08, 2010 10:50 AM
To: Johnson, Holly S (ENV)
Subject: Comments on Green Line Extension DEIR for Ian Bowles

Dear Secretary Bowles,

I am writing to offer my comments on the Draft Environmental Impact Report. As a former resident of Somerville and user of the Community Path, and as strong supporter of pedestrian and bike friendly policies to make urban areas more livable, I think it is essential the DEIR state the following clearly:

I-153-001

- The extension of the Somerville Community Path will be designed by MassDOT's contractors as previously agreed to, and

- The Green Line extension and Community Path extension will be built and managed as one unified project

I think it's readily apparent that, if the Community Path extension is not done as part of the Green Line extension, it will never happen due to much higher costs associated with adding on the Community Path extension separately. Since the entire project is intended to reduce pollution and take cars off the road, it's only natural that the project would also encourage bicycle and pedestrian traffic, which I believe which augment the progress made by the T rather than take riders away. It's important the DEIR clearly state the Community Path extension will be an integral part of the Green Line extension.

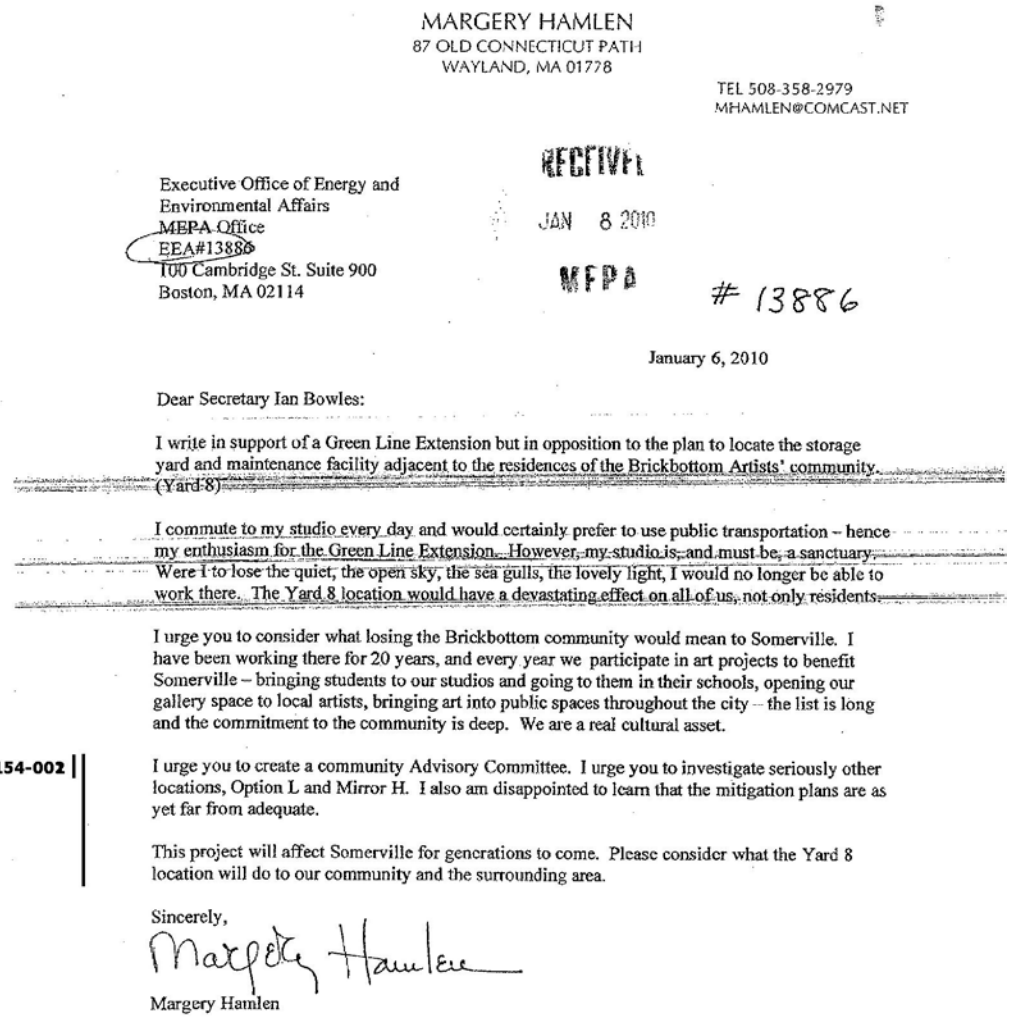
Thank you for consider my comments as you review this report.

Sincerely,
Daniel Hamalainen
62 Waverley Oaks Road
Waltham, MA 02452

1

I-153-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.



MARGERY HAMLEN
87 OLD CONNECTICUT PATH
WAYLAND, MA 01778

TEL 508-358-2979
MHAMLEN@COMCAST.NET

RECEIVED
JAN 8 2010
MEPA

Executive Office of Energy and
Environmental Affairs
MEPA Office
EEA#13886
100 Cambridge St. Suite 900
Boston, MA 02114

13886

January 6, 2010

Dear Secretary Ian Bowles:

I write in support of a Green Line Extension but in opposition to the plan to locate the storage yard and maintenance facility adjacent to the residences of the Brickbottom Artists' community. (Yard 8)

I commute to my studio every day and would certainly prefer to use public transportation – hence my enthusiasm for the Green Line Extension. However, my studio is, and must be, a sanctuary. Were I to lose the quiet, the open sky, the sea gulls, the lovely light, I would no longer be able to work there. The Yard 8 location would have a devastating effect on all of us, not only residents.

I urge you to consider what losing the Brickbottom community would mean to Somerville. I have been working there for 20 years, and every year we participate in art projects to benefit Somerville – bringing students to our studios and going to them in their schools, opening our gallery space to local artists, bringing art into public spaces throughout the city – the list is long and the commitment to the community is deep. We are a real cultural asset.

I-154-002

I urge you to create a community Advisory Committee. I urge you to investigate seriously other locations, Option L and Mirror H. I also am disappointed to learn that the mitigation plans are as yet far from adequate.

This project will affect Somerville for generations to come. Please consider what the Yard 8 location will do to our community and the surrounding area.

Sincerely,

Margery Hamlen

Margery Hamlen

I-154-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-154-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: John Harding [jharding@cube3studio.com]
Sent: Thursday, January 07, 2010 3:11 PM
To: Johnson, Holly S (ENV)
Subject: DEIR Comment Letter
Attachments: DEIR Comment Letter_010810_Harding.pdf

Ms. Johnson –

Please find attached my comment letter regarding the Draft Environmental Impact Report for the Green Line extension project.

Regards,

John Harding V LEED AP, Associate AIA
Project Coordinator

CUBE 3 Studio LLC
architecture • interiors • planning

360 Merrimack Street
Building 5, Floor 3
Lawrence, MA 01843

Main: 978.989.9900 x18
Direct: 978.379.8718
Dir. Fax: 978.379.8763
Cell: 603.682.0585

Web: www.cube3studio.com

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January 08, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Via email: Holly.S.Johnson@state.ma.us

Dear Secretary Bowles:

I am a Medford resident writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Cambridge, Somerville and Medford, EEA #13886.

I-155-001

I strongly support the Green Line extension, and urge that it be built in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. I ask that you reject the DEIR as written because it does not comply with the December 1, 2006 MEPA certificate and does not satisfy the legal mandate to serve the Medford Hillside neighborhood.

The DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014. For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

- **A two-phased approach is unacceptable.** The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified is whatsoever a bad idea.

- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. There are five separate Environmental Justice sites within walking distance of the Route 16 terminus that will simply not be served by a College Ave terminus.

- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. The vast majority of the Medford Hillside neighborhood will not be served by a College Ave terminus.

- **The Route 16 station design in the DEIR is inadequate.** The DEIR design for the Route 16 station is deficient and unworkable. It unnecessarily calls for the taking of two existing buildings that should remain intact with a proper design. The Final EIR should show a realistic and workable design for the Route 16 site, which is by far the best location for a terminus for the Green Line Extension.

In conclusion, I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis to go to Route 16 to serve the largest possible population, achieve the maximum ridership, and provide the maximum air quality and environmental benefits to the residents of Cambridge, Somerville, and Medford.

Thank you.

John Harding
69 Grove Street
Medford, MA 02155

I-155-001

Please see Comment Letter I-002 and responses to comments I-002-002, I-002-007, I-002-008, I-002-010.

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

RE: Green Line Extension Project

Dear Secretary Bowles:

I-156-001

As a resident of the Glass Factory Condominiums, I am extremely concerned about the design and placement of the Green Line Extension and the new Lechmere Station. The placement of the new Lechmere Station negatively impacts me and the residents of the Glass Factory tremendously. Unless the Glass Factory residents' concerns are addressed, the construction of the new Lechmere Station and Green Line Extension will be viewed as an extremely negative project. Please see my following concerns:

I-156-002

TRACKS ARE TOO CLOSE TO OUR BUILDING.

The present design depicts the tracks running very close to the rear of our building. This is ridiculous because it does not have to be like this. No representative of the MBTA has given a decent reason why the old tracks need to be used. Why can't the tracks be moved further away from our building? This especially impacts the residents in the rear of the building. I happen to live on the rear side of the building. I am extremely concerned about the noise this construction will bring as well as the day-to-day noise of the trains passing by. I am already frustrated by the noise of the commuter rail located behind our building. The MBTA has said that they will try to prevent noise, but this is not a guarantee. Where would this money come from?

Additionally, the views and light will be severely impacted by the elevated tracks. I understand that this project is being constructed no matter what. There is no arguing against the extension of the green line. However, why can't you make it as pleasant an experience as possible for the Glass Factory residents? We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

I-156-003

LECHMERE STATION.

Presently your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. NO ONE WANTS TO LIVE ADJACENT TO A TRAIN STATION! Please move the station closer to East

I-156-001

Please see Comment Letter I-013, plus the additional responses below.

I-156-002

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. These will be new tracks on an aerial guideway, not existing tracks at ground level northeast of the Glass Factory Condominiums. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-156-003

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-156-003

Street, where it could be part of the entrance way to the eventual North Point development. The current plan of the station is hideous and cheap looking. Again, please make the station as aesthetically pleasing as possible. This is our home! We do not want to look at an eyesore of a train station everyday. Perhaps you could design the station to as well designed as the Charles MGH station on the Red Line. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.

The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.

Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

MAINTENANCE FACILITY.

I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

I-156-004

REDUCE SURFACE PARKING.

The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. You make it seem like a positive aspect that you will be redoing a parking lot to hold a greater number of vehicles. Since this will no longer be the end of the Green Line, why do we need so much parking at the Lechmere Station? Perhaps some of this parking area could serve as guest parking for the Glass Factory since you will be destroying any room behind our building that currently exists. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

I-156-004

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

As stated in DEIR/EA Section 3.7, station designs will minimize light impacts to neighboring properties. The MBTA generally does not include landscaping within station parking areas, though other station landscaping opportunities will be evaluated. As explained in FEIR Chapter 5, design criteria for all Project elements, including Lechmere Station lighting and landscaping, and detailed station designs will be developed during preliminary engineering.

Thank you for your attention to these matters.

Sincerely,

Jennifer Harris

Jennifer Harris
The Glass Factory
169 O'Brien Highway, Apt. 605
Cambridge, MA 02141

January 07, 2010

RECEIVED

JAN 8 2010

MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-157-001 As a property owners and residents of the Glass Factory Condominiums, we are very concerned about the design and placement of the Green Line Extension and new Lechmere Station.

SAFETY CONCERNS

I-157-002 We have a major concern about the darkness, crime, the homeless living, smoking, urinating under the elevated tracks. We will need additional security and new fencing since so many people will cross by our parking areas. Health concerns from bus fumes, electric fields, excessive noise, and smokers outside our windows.

TRACKS - TOO CLOSE TO OUR CONDOMINIUM BUILDING

The present design shows the tracks running extremely close the rear of our building; anywhere from 30 to 50 feet. We ask that you encourage your designers and engineers to position the tracks as far to the rear of the building as feasible to preserve the views and natural light to many of the residential properties that will be severely influenced by the elevated tracks. The design and placement of the tracks and supports should be as to minimize the visual impact to those properties and also minimize noise and vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION

At present, the designs show the new Lechmere Station so close to the Glass Factory that it looks like an out-crop of our condominium building. Please consider relocating the station closer to East Street, where it could be part of the entrance way to the North Point development. The station design needs to be substantially improved, it is not constant with current or proposed neighborhood ascetics the station should designed to enrichment this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge and Boston. The station should be an amenity and should be of similar quality to the Charles Street station.

I-157-001

Please see Comment Letter I-013 for responses to this form letter, as well as the additional response below.

I-157-002

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project, with additional consideration given to urban design and pedestrian environment considerations under the trackway areas. Fencing options along the Glass Factory property are currently proposed and will continue to be evaluated. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

It is anticipated that the Project will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As described in Chapter 5 of the FEIR, and in Chapter 8, Mitigation Measures, the bus layover facility would be posted "no idling" in conformance with MBTA policy.

BUS TRAFFIC

The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a major concern. Consider moving the sidewalks where passengers wait farther from our building to preserve our privacy and minimize impacts from noise, light, and smoking. If too close, it feels like we are living a bus station.

PRESERVE OUR TREES AND GREEN SPACES

Presently there is a row of mature evergreen trees behind our building. We urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks could be located on the far side of the large trees. These trees would serve as a natural screen for the tracks and bus way.

MAINTENANCE FACILITY

We unequivocally oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively eradicate further development in the North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to the City of Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however we would prefer there be no maintenance facility in this area but rather it is placed at the end of the line.

REDUCED SURFACE PARKING

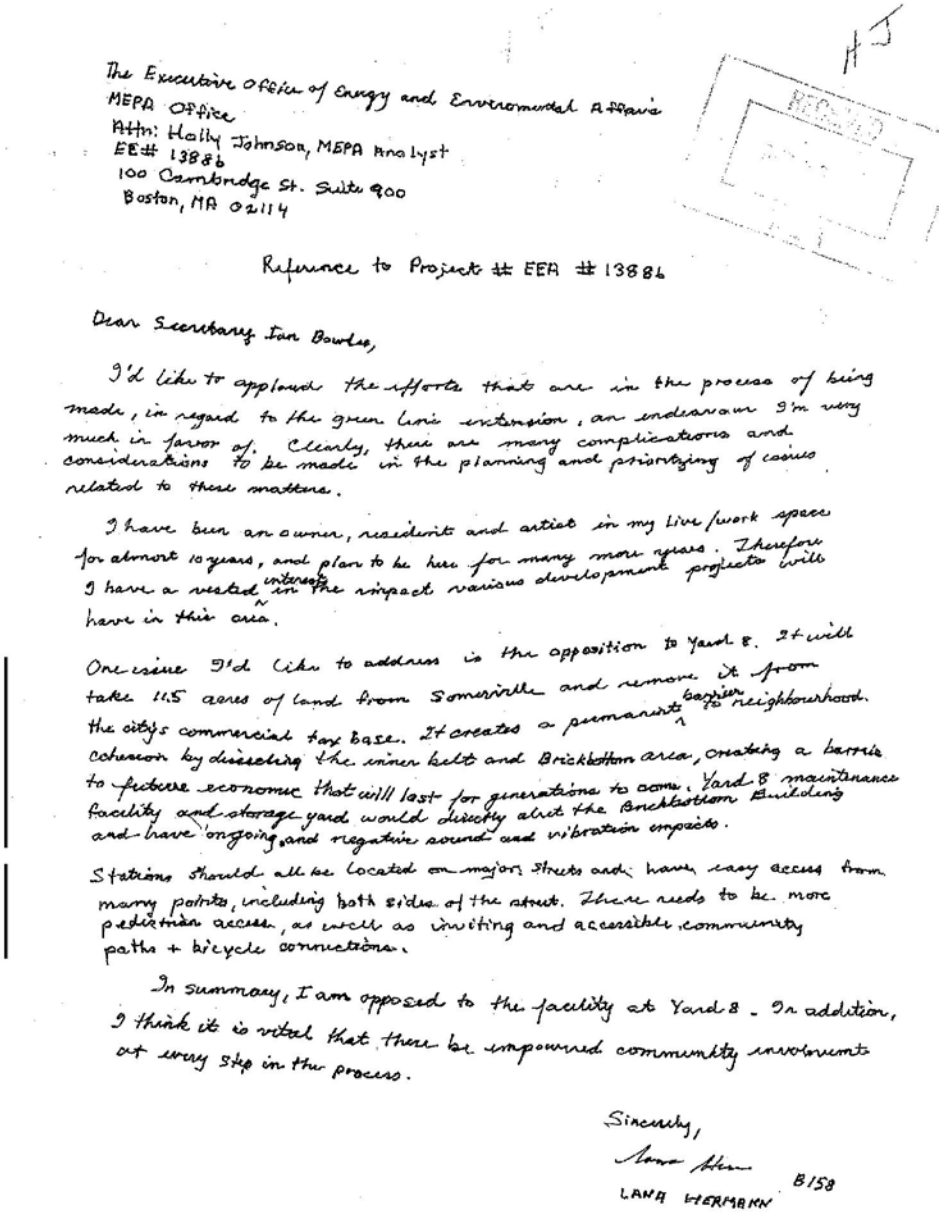
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages the North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing our concerns.

Best regards,

Michael and Jacqueline Heath
169 Monsignor O'Brien Highway
Unit 214

Cambridge, MA 01241-1255



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge St. Suite 900
Boston, MA 02114

Reference to Project # EEA # 13886

Dear Secretary Ian Bowles,

I'd like to applaud the efforts that are in the process of being made, in regard to the green line extension, an endeavour I'm very much in favor of. Clearly, there are many complications and considerations to be made in the planning and prioritizing of issues related to these matters.

I have been an owner, resident and artist in my live/work space for almost 10 years, and plan to be here for many more years. Therefore I have a vested interest in the impact various development projects will have in this area.

I-158-001 One issue I'd like to address is the opposition to Yard 8. It will take 11.5 acres of land from Somerville and remove it from the city's commercial tax base. It creates a permanent barrier to neighbourhood cohesion by dissecting the inner belt and Brickbottom area, creating a barrier to future economic that will last for generations to come. Yard 8 maintenance facility and storage yard would directly abut the Brickbottom Building and have ongoing and negative sound and vibration impacts.

I-158-002 Stations should all be located on major streets and have easy access from many points, including both sides of the street. There needs to be more pedestrian access, as well as inviting and accessible community paths + bicycle connections.

In summary, I am opposed to the facility at Yard 8. In addition, I think it is vital that there be empowered community involvement at every step in the process.

Sincerely,
Lana Herman
LANA HERMANN

B158

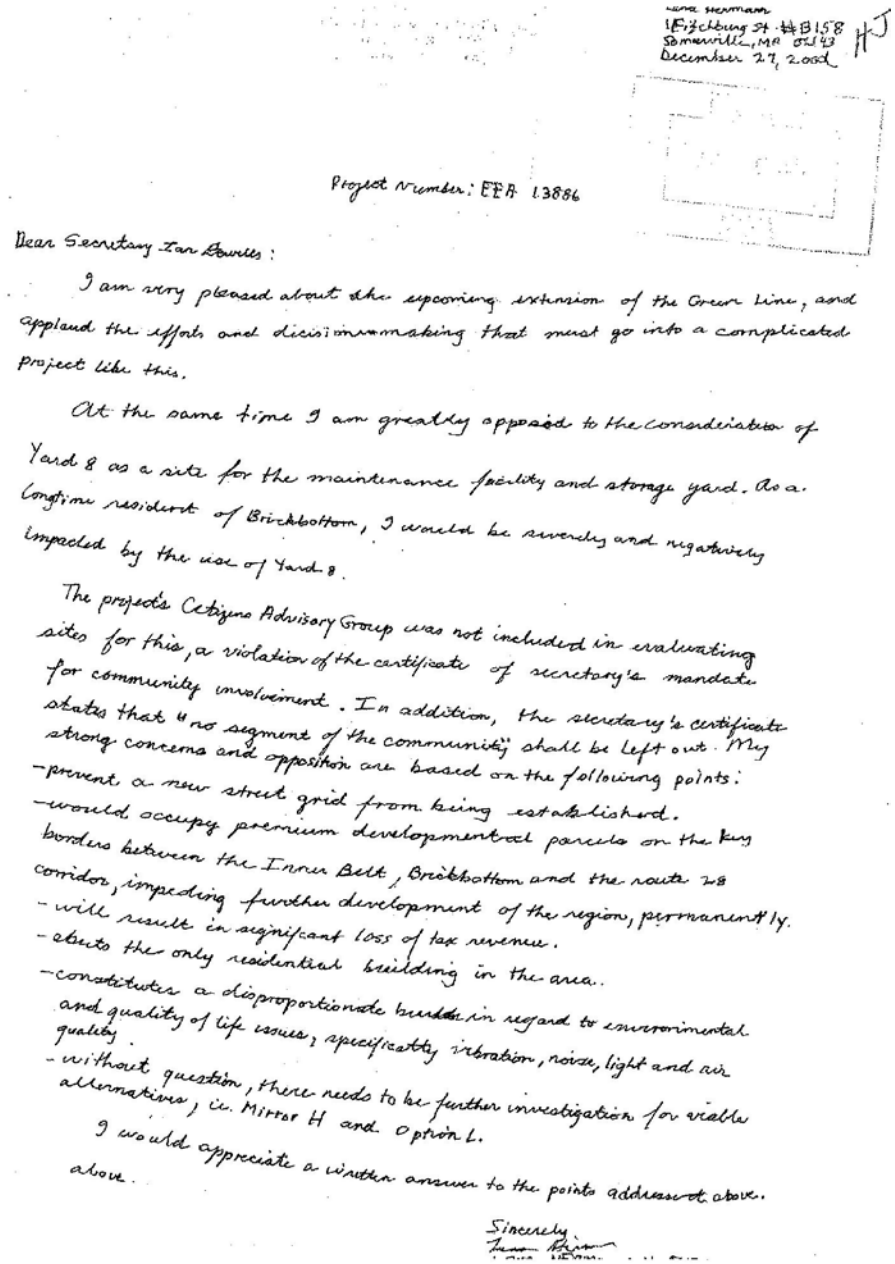
I-158-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-158-002

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.



Lena Sherman
1 Fitchburg St #B158
Somerville, MA 02143
December 27, 2008

Project Number: EEA 13886

Dear Secretary Ian Bowles:

I am very pleased about the upcoming extension of the Green Line, and applaud the efforts and decisionmaking that must go into a complicated project like this.

I-159-001 At the same time I am greatly opposed to the consideration of Yard 8 as a site for the maintenance facility and storage yard. As a longtime resident of Brickbottom, I would be severely and negatively impacted by the use of Yard 8.

I-159-002 The project's Citizens Advisory Group was not included in evaluating sites for this, a violation of the certificate of secretary's mandate for community involvement. In addition, the secretary's certificate states that "no segment of the community" shall be left out. My strong concerns and opposition are based on the following points:

I-159-003
- prevent a new street grid from being established.
- would occupy premium developmental parcels on the key borders between the Inner Belt, Brickbottom and the route 28 corridor, impeding further development of the region, permanently.
- will result in significant loss of tax revenue.
- abuts the only residential building in the area.
- constitutes a disproportionate burden in regard to environmental and quality of life issues, specifically vibration, noise, light and air quality.
- without question, there needs to be further investigation for viable alternatives, i.e. Mirror H and Option L.

I would appreciate a written answer to the points addressed above.

Sincerely

I-159-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-159-002

As described in the DEIR/EA Section 1.5.3, throughout the development of the DEIR/EA regular coordination with the Advisory Group and local municipalities on various aspects of the Project, including siting of the maintenance facility, occurred. During the Summer of 2008, tutorials on the proposed maintenance facility as well as site visits to existing maintenance facilities were conducted for Advisory Group members. Additionally, in December 2009 a public meeting was held on the various maintenance facility sites.

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-159-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option

L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Johnson, Holly (EEA)

From: jonathan.herzog@gmail.com on behalf of Jonathan Herzog [jherzog@alum.mit.edu]
Sent: Friday, January 08, 2010 4:51 PM
To: Johnson, Holly S (ENV)
Subject: Comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886

To whom it may concern:

I-160-001

The following is a sample letter regarding the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886, distributed by the Medford Green Line Neighborhood Alliance. I agree with its contents in full. If you have any questions, please do not hesitate to contact me by email or:

Jonathan Herzog
101 Woods Ave.,
Somerville MA 02144.

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

I-160-002

First, A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

1

I-160-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-160-002

Please see Comment Letter I-002 for responses to this form letter.

I-160-002

There are many, many problems with the Phase II approach, including:

• Risk. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.

• Terminus Impact. Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

• Cost. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

• Project Management. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate,
multi-stage efforts for such a small add-on project as a single station stop.

• Environmental Justice: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

• Legal Mandate: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails
to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

Second, College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

Third, the Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions
and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

--
Jonathan Herzog
jherzog@alum.mit.edu

Johnson, Holly (EEA)

From: chirohill@aol.com
Sent: Friday, January 08, 2010 11:05 AM
To: Johnson, Holly S (ENV)
Subject: Green line extension

I-161-001 Why not extend the Green Line to Alewife and give people an alternative to get into Boston and for other parts of the cit to connect. The T could be put under Route 16 to Alewife which would be a meaningful connection.

Peter G. Hill

Boston Copley Square Chiropractic
304 Columbus Avenue
Boston, MA 02116
617-536-9119
www.chirohill.com
Twitter: Chirohill

www.communicationhelper.com www.blogspot.communicationhelper.com
781-325-1848
Twitter: Commhelper

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I-161-001

The current limit of the Proposed Project only extends the Green Line as far as College Avenue, with a potential future extension to Mystic Valley Parkway / Route 16. However, as the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

Johnson, Holly (EEA)

RECEIVED

JAN 8 2010

MEPA

From: Hilliard, Brian [bhilliard@smma.com]
Sent: Friday, January 08, 2010 8:30 AM
To: holly.s.johnson@state.ma.us
Subject: Green Line Extension Draft EIR (EEA #13886)

Ian and Holly-
As a recent first time home buyer in Medford, the Green Line extension is of great interest to myself, wife and young son. Being connected to both Union Square and particularly downtown would be of great importance. We moved to the Boston area 10 years ago from the great expanses of the Rocky mountains, and public transit was a big factor in our decision to move. We have always lived close to one form or another and use it extensively.
I'd like to add that I support these points included below that have been drafted by others, but summarize well.

I-162-001
- *Eliminate the Yard 8 Option for the Maintenance facility (that will prevent economic development and integration of the Inner Belt) and do a full analysis of the other locations: Mirror H option, Option L and the alternate Option L-BET.*

I-162-002
- MassDOT should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the former EOT.
- That for cost efficiencies and technical necessities, the Green Line and Community Path extensions will be constructed as one project and must clearly be described as such by MassDOT.
- MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal funding.

I-162-003
- Design and construct the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project (i.e., do not stop at College Ave.) It makes no sense in doing this in 2 phases. It only creates a risk that it will never be extended to Route 16.

I-162-004
- Design and construct the Union Square station so that it can extended to Porter Sq. in the future.

Thanks for your time and support-
Brian Hilliard

Brian G. Hilliard
Architecture
Symmes Maini & McKee Associates, Inc.
1000 Massachusetts Avenue, Cambridge, MA 02138
t: 617.520.9291
f: 617.354.5758
bhilliard@smma.com
www.smma.com

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I-162-001
An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

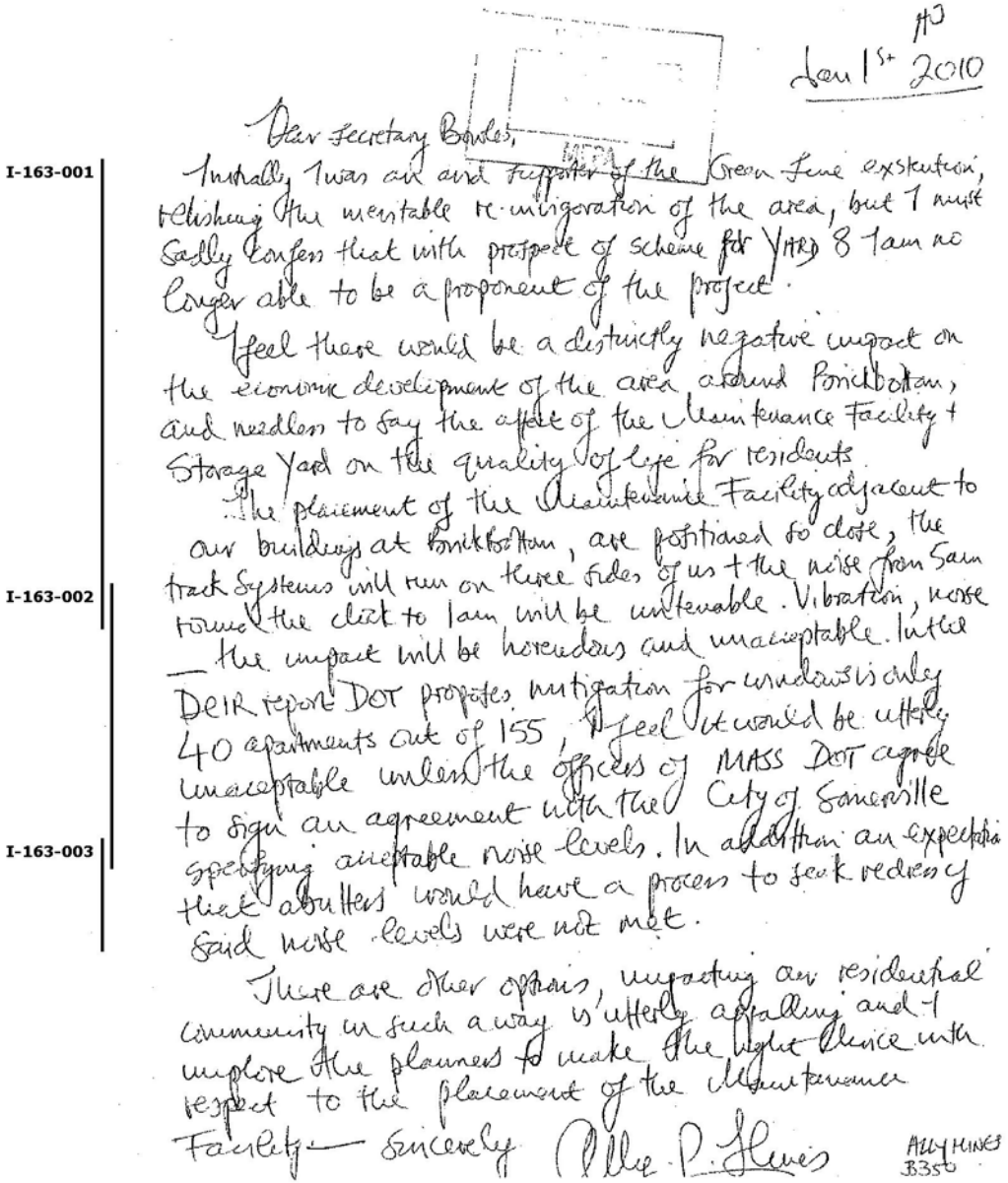
I-162-002
MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-162-003
Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the

Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-162-004

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.



Jan 1st 2010

Dear Secretary Bowles,

I-163-001 Initially I was an avid supporter of the Green Line extension, relishing the inevitable re-invigoration of the area, but I must sadly confess that with prospect of scheme for YARD 8 I am no longer able to be a proponent of the project.

I feel there would be a distinctly negative impact on the economic development of the area around Poindexter, and needless to say the affect of the Maintenance Facility + Storage Yard on the quality of life for residents.

I-163-002 The placement of the Maintenance Facility adjacent to our buildings at Brickbottom, are positioned so close, the track systems will run on three sides of us + the noise from Sam round the clock to 1am will be intolerable. Vibration, noise — the impact will be horrendous and unacceptable. In the DEIR report DOT proposes mitigation for windows is only 40 apartments out of 155, I feel it would be utterly unacceptable unless the officers of MASS DOT agree to sign an agreement with the City of Somerville

I-163-003 specifying acceptable noise levels. In addition an expedite that abutters would have a process to seek redress said noise levels were not met.

There are other options, impacting on residential community in such a way is utterly appalling and I implore the planners to make the right decision with respect to the placement of the Maintenance Facility — Sincerely Ally P. Hines

ALLY HINES
B35b

I-163-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-163-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

I-163-003

Chapter 8, Mitigation, of the FEIR describes the proposed mitigation measures and the process by which they will be implemented and monitored following construction.

RECEIVED

JAN 8 2010

MEPA

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

As a resident of Medford Hillside and regular MBTA commuter, I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886. I have lived for nine years in Medford Hillside. I work in Back Bay, so my daily commute involves several modes of public transportation — generally an express bus to Haymarket where I transfer to the Green Line

I-164-001

I strongly support the Green Line extension. For myself, extending the Green Line to a terminus station at Mystic Valley Parkway/Route 16 will provide a one-seat ride to work, while a terminus at College Avenue is too far away to serve my needs. For my neighborhood, I believe that constructing the entire project in one phase, with a terminus station at Route 16, is the most practical, beneficial, and cost-effective means to provide public transportation to the underserved communities in Medford and, in particular, the Medford Hillside area.

The DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by the SIP's deadline of December 31, 2014.

The DEIR as written does not present the best possible vision of the project, or even a reasonable and considered compromise among options. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to reject the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. College Avenue must not be a terminus station.

I-164-002

Without a Route 16 station, the College Avenue stop, which is designed to be an interim station, would become the terminus for the Green Line extension. The College Avenue stop is a bad location for a terminus due to already existing traffic flow problems, inconvenient access from densely populated neighborhoods in Medford Hillside, and a lack of opportunity for transit-oriented development at College Avenue.

Splitting the project into two phases increases the time during which the College Avenue abutters must deal with construction work, as well as increasing the amount of work required at College Avenue to allow the stop to be used as a terminus — whether temporary or permanent.

I-164-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-164-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

2. The Route 16 station design is inadequate.

I-164-003

The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations.

The Medford Green Line Neighborhood Alliance has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

3. A two-phase approach increases costs, increases time to completion, and increases the risk that the project will never be fully implemented. A single-phase project will minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

I-164-004

No funding source is identified in the DEIR for the separate stand-alone Phase II Mystic Valley Parkway/Route 16 station. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.

The two-phase approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. The later creation of a single stop and less than one mile of track will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

I-164-005

The environmental justice populations adjacent to the Route 16 station cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus..

To summarize, the Draft Environmental Impact Report does not fully account for the use of College Avenue as a terminus, even if only temporarily, nor does it present a reasonable plan for the Route 16 terminus. I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension fully meet the legal obligation to provide public transit to Medford Hillside in a way that truly benefits the neighborhoods it will go through.

Thank you.

Lisa Hodsdon
11 Lyman Avenue
Medford, MA 02155

I-164-003

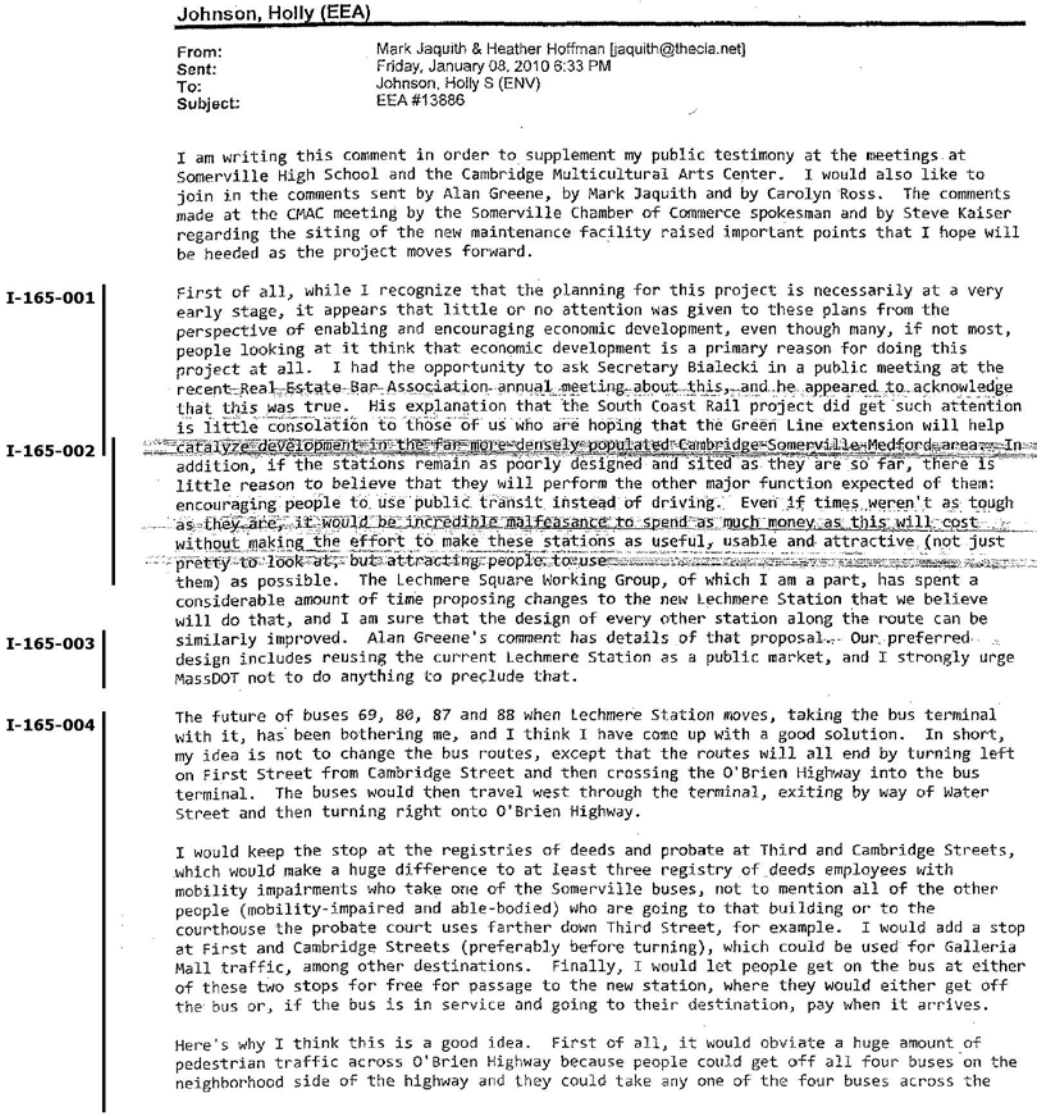
All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-164-004

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-164-005

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.



Johnson, Holly (EEA)

From: Mark Jaquith & Heather Hoffman [jaquith@thecia.net]
Sent: Friday, January 08, 2010 6:33 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886

I am writing this comment in order to supplement my public testimony at the meetings at Somerville High School and the Cambridge Multicultural Arts Center. I would also like to join in the comments sent by Alan Greene, by Mark Jaquith and by Carolyn Ross. The comments made at the CMAC meeting by the Somerville Chamber of Commerce spokesman and by Steve Kaiser regarding the siting of the new maintenance facility raised important points that I hope will be heeded as the project moves forward.

I-165-001 First of all, while I recognize that the planning for this project is necessarily at a very early stage, it appears that little or no attention was given to these plans from the perspective of enabling and encouraging economic development, even though many, if not most, people looking at it think that economic development is a primary reason for doing this project at all. I had the opportunity to ask Secretary Bialecki in a public meeting at the recent Real Estate Bar Association annual meeting about this, and he appeared to acknowledge that this was true. His explanation that the South Coast Rail project did get such attention is little consolation to those of us who are hoping that the Green Line extension will help

I-165-002 catalyze development in the far more densely populated Cambridge-Somerville-Medford area. In addition, if the stations remain as poorly designed and sited as they are so far, there is little reason to believe that they will perform the other major function expected of them: encouraging people to use public transit instead of driving. Even if times weren't as tough as they are, it would be incredible malfeasance to spend as much money as this will cost without making the effort to make these stations as useful, usable and attractive (not just pretty to look at, but attracting people to use them) as possible. The Lechmere Square Working Group, of which I am a part, has spent a considerable amount of time proposing changes to the new Lechmere Station that we believe

I-165-003 will do that, and I am sure that the design of every other station along the route can be similarly improved. Alan Greene's comment has details of that proposal. Our preferred design includes reusing the current Lechmere Station as a public market, and I strongly urge MassDOT not to do anything to preclude that.

I-165-004 The future of buses 69, 80, 87 and 88 when Lechmere Station moves, taking the bus terminal with it, has been bothering me, and I think I have come up with a good solution. In short, my idea is not to change the bus routes, except that the routes will all end by turning left on First Street from Cambridge Street and then crossing the O'Brien Highway into the bus terminal. The buses would then travel west through the terminal, exiting by way of Water Street and then turning right onto O'Brien Highway.

I would keep the stop at the registries of deeds and probate at Third and Cambridge Streets, which would make a huge difference to at least three registry of deeds employees with mobility impairments who take one of the Somerville buses, not to mention all of the other people (mobility-impaired and able-bodied) who are going to that building or to the courthouse the probate court uses farther down Third Street, for example. I would add a stop at First and Cambridge Streets (preferably before turning), which could be used for Galleria Mall traffic, among other destinations. Finally, I would let people get on the bus at either of these two stops for free for passage to the new station, where they would either get off the bus or, if the bus is in service and going to their destination, pay when it arrives.

Here's why I think this is a good idea. First of all, it would obviate a huge amount of pedestrian traffic across O'Brien Highway because people could get off all four buses on the neighborhood side of the highway and they could take any one of the four buses across the

I-165-001

Anticipated indirect and cumulative effects of the Project, including impacts on corridor transportation and traffic, growth, property values, land use, transit-oriented and economic development are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects. As stated in FEIR Section 6.4, MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. These workshops will offer an opportunity to discuss how facility design can influence indirect and cumulative effects.

I-165-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. The stations have been designed to meet MBTA standards, as well as to be ADA-compliant. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-165-003

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment.

I-165-004

highway to get to the new station. It would also give the neighborhood the same level of bus service we get now, which would lessen the hardship we will be suffering with the move. Also, if you look at the map of the future roadways, you will see that all of these turns are right angles or obtuse angles, which would make it easier and safer for the buses to turn. By contrast, under what I assume to be the current plan, the 69 bus would have to make a very tight turn from Third Street onto O'Brien Highway and then turn left almost immediately onto Water Street across three lanes of highway traffic, which the other three buses would also have to do, minus the turn from Third Street. The turn from First Street onto the O'Brien Highway is also tighter than the turn from Water Street. Finally, my plan would have the buses making no left turns from O'Brien Highway; they would be going straight across at First Street.
All in all, I think that this plan would not have a huge impact on schedules (who knows? it might even be the same, given the omission of left turns off the highway), and it would create an enormous amount of goodwill when people realize that they will have an alternative way to cross O'Brien Highway.

I-165-005

As for the maintenance facility, it seems to me that Yard 8 will almost certainly invite lawsuits that will throw a huge monkeywrench into this project because of its unreasonable impact on the residents of the Brickbottom Condominium and its effect on Somerville's plans to develop Brickbottom and Inner Belt. Mirror H would likewise tend to invite a lawsuit from the City of Cambridge and the B and M Railroad, which owns most of NorthPoint and still expects to build a massive development there. Scheme L is, as some of the testimony at CMAC put it, the least objectionable of the three alternatives that were being presented, but, as I said above, the spokesman for the Somerville Chamber of Commerce made a very good argument for using land already owned by the Commonwealth on the north side of the Boston Engine Terminal.

I-165-006

Finally, given what I see as tremendous flaws in this preliminary design, I do not support MassDOT's request that the draft EIR be considered the final EIR. Proper attention paid to the many good suggestions for improvement that you are receiving will pay huge dividends later when it comes time to put shovels in the ground and turn plans into reality. As the carpentry maxim goes, measure twice, cut once. A little more time spent improving the desigr now will make this a far better project and make future generations thank us.

Heather Maguire Hoffman
213 Hurley Street
Cambridge, Massachusetts 02141

I-165-004

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Routes 80, 87 and 88 are expected to enter the station directly from O'Brien Highway via Water Street and not travel to Cambridge Street. The path for Route 69 can remain on Cambridge Street in East Cambridge, with inbound service along North First Street, O'Brian Highway, and Water Street.

I-165-005

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-165-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Emailed
FAXED

Karen Holtzman & Thomas Gardon | 1 Fitchburg St. C523 | Somerville, MA

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Ian Bowles:

We are Karen Holtzman and Thomas Gardon, residents of the Brickbottom Artists Buildings. Ms. Holtzman has been a resident in Brickbottom's Cannery building for 21 years. Mr. Gardon has been a resident of Somerville for over 20 years and a resident of the Brickbottom Cannery for the past 11 years. We are pleased that the Union Square and Brickbottom areas of Somerville will have increased access to public transportation and expect that the location of an MBTA station in these areas will help spur development. However, the extreme burden being imposed on the Brickbottom/Inner Belt area is cause for great alarm.

The DEIR speaks to environmental justice, and we suspect that there are many ways (both legally and literally) to interpret the phrase. But if there is an injustice being perpetrated in this proposal it is on the Brickbottom/Inner Belt community and, by extension, the City of Somerville.

- Brickbottom is being asked to acquiesce to being surrounded by 2 Green Line tracks that will be operating from 5:30 am until 12:30 pm; it is being told to withstand the construction and 24/7 operation of a maintenance facility and storage yard to be located just yards away from the buildings, along with its concomitant light, noise, vibration and pollutants.

- The city of Somerville is being asked once again to bear the brunt of project construction and land takings while losing hope for future development.

- The citizens of Somerville are being told that there will be no property tax relief in the future because the MBTA is taking one of the few remaining parcels of developable land in the city.

- The Brickbottom/Inner Belt area will be subjected to a permanent barrier to neighborhood cohesion with a maintenance facility and storage yard that cuts off the Inner Belt from Brickbottom.

- Any future hope for a Brickbottom/Glass Factory corridor that could unite the Cambridge/Lechmere area to Brickbottom and thus further the transportation options of a traditionally underserved population would be lost by the use of Yard 8 for a maintenance facility/storage yard.

- And the residents of Brickbottom are being told that they are not relevant in the expansion plans of the MBTA, that there will be negligible moneys allotted for mitigation, and that any benefit that a Green Line station in the area might bring will be offset by 11.5 acres of noise, vibration and pollutants that will affect the lives of residents and the city's

I-166-001 The DEIR states that because Brickbottom is already situated next to a rail yard the residents will find little change in the area. Like many sections of the report, this fantasy speaks to the lofty hopes and aspirations of the MBTA and hearkens not at all to reality. The rail activity in the area adjacent to Yard 8 is sporadic and has minimal impact on the community. To suggest that the construction of a maintenance facility and storage yard will somehow be little more than a nuisance to Brickbottom residents is disingenuous.

We ask that the proposal for siting the maintenance facility and storage yard in Yard 8 be abandoned and encourage continued study of Mirror H, Option L and additional alternate sites. We also request that the project not go to a Final EIR in regards to the maintenance facility.

I-166-002 The footprint of the proposed site will have an adverse effect on whatever area it occupies. Any maintenance facility/storage yard should be configured to minimize adverse impact on economic development and neighborhood connectivity.

I-166-003 **MassDOT should explore the possible reconfiguration and reuse of the existing BET land (43 acre commuter rail maintenance facility) in an effort to consolidate other MBTA land uses in the Inner Belt area.**

I-166-004 The MBTA proposes to add a maintenance facility and storage yard for more vehicles than are needed for the Green Line Extension. System-wide storage needs should be evaluated system-wide and be required as part of this project. It is imperative that forward-thinking planning and design for the facility and storage yard is formulated to blend with future mixed-use development.

I-166-005 **We request that a citizen advisory committee (CAC) be created to oversee the ongoing direction of the project and to ensure that the community has a voice in the process.**

The formulation of such a body is part of an optional MEPA Special Review Process (Regulation 301 CMR 00 MEPA which is cited on the MEPA website). Adoption of MEPA Regulations calls for a special review process based on a CAC that is enabled to review the project, address community concerns, drive issue redress and implement remedies through the entire process.

The CAC should be empowered to review every contract in the bid process in order to confirm that proper and agreed-to mitigation language is included before contracts related to the project are awarded.

Regarding mitigation issues related to resident abutters:

I-166-006
- There needs to be a process in place to address mitigation problems both during construction and after the fact; there must be a way for residents to seek redress if specific goals are not met.
- Mitigation, especially mitigation for noise and vibration, must be in place before construction begins and measures to avoid or eliminate these impacts should be identified and implemented.
- Considering the MBTA's woeful history, there is concern not just about construction and immediate post-construction impacts, but the future upkeep of all MBTA facilities to maintain any new Green Line stops and facilities.

I-166-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-166-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-166-003

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

I-166-004

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

I-166-006

With the introduction of the Green Line Extension, residents of the Brickbottom Artists Buildings will live in perpetuity with two Green Line spurs on either side of the building. Many Brickbottom residents will co-exist with the Green Line just 19 feet away. This proximity needs to be investigated to see if there are any alternatives, and be redressed and thoroughly remediated.

I-166-007

One of the greatest sources of noise in the system is the air conditioning of the light rail cars. **We request that fan-quieting mitigation* be implemented on cars stored and used on the Green Line Extension.** This can be accomplished by installation of quiet, efficient fans. Placement of fans on the vehicle can make a significant difference in the noise radiated toward residents closest to the tracks, especially, on the Union Square spur.

Additionally, **Green Line railcars should be fitted with acoustical absorption* under the cars.** This has been demonstrated to provide up to 5 decibels of mitigation for wheel/rail noise. Similarly, vehicle skirts* over the wheels can provide 5 decibels of mitigation. By carrying their own noise barriers, vehicles with these features can provide cost-effective noise reduction.

*These recommendations are included in the 2006 Transit Noise and Vibration Impact Assessment, done by the Federal government. This same document was cited in the DEIR.

I-166-008

Mitigation discussion in the DEIR is confusing and insufficient. DEIR Section 5.4.7-3 Noise Mitigation, p. 5-118, states: "At some locations projected to be exposed to noise impact, noise barriers may not be a feasible or effective means of mitigation." However, only 40 residences in Brickbottom are designated for soundproofing. Brickbottom has a total of 155 residences.

The DEIR further states (Section 6.5.4-1 Environmental Justice, p. 6-7): "The proposed maintenance facility site is located in an existing industrial area next to the MBTA Fitchburg and Lowell Lines. There would be no moderate or severe impacts from noise after mitigation was implemented. Therefore, there would be no disproportionate noise impacts to environmental justice populations from the proposed maintenance facility." This language is misleading, disingenuous, and contrary to the report's own findings.

I-166-009

Indoor air quality changes have not been studied as part of the DEIR. There is no mention of indoor air quality as well as air-conditioning mitigation to accommodate the installation of air-tight noise-reduction windows.

I-166-010

We live on the fifth floor of Brickbottom's Cannery building, directly overlooking Yard 8. The impending addition of the Green Line Extension and the possibility of a maintenance facility and storage yard will mean that we will be exposed to around-the-clock noise, vibration, light and pollution. If window mitigation means a permanent sealing of our unit, the need for year-round air conditioning will become necessary. There is no central air conditioning in the building – most residents use window air conditioners for those few days when opening the window provides little relief.

The need to keep closed all windows in our unit 365 days a year to help mitigate noise and pollution is an unbearable burden and devastating to our quality of life.

The need to air condition our unit 365 days a year is grossly prohibitive and, if the current plan for the maintenance facility and storage yard location in Yard 8 comes to pass, we will demand that the MBTA be responsible for any and all mitigation costs related to air conditioning and air quality control, both during and after construction.

The current DEIR has several flaws and is missing important measurements needed to identify the current environmental state of Brickbottom to accurately calculate the actual environmental

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-166-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-166-006

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-166-007

While noise from fans in auxiliary equipment such as air-conditioners on transit cars is a significant noise source for stationary trains, the greatest source of noise on moving trains is generated at the wheel-rail interface. Installing quieter fans could be effective in reducing noise emissions from Green Line cars while stationary, such as when they are in the maintenance yard being prepared for revenue service. However, this mitigation measure would not be effective in reducing the noise generated by moving Green Line cars or the total noise generated by both Green Line and commuter trains. Noise barriers proposed for the

impact of the Green Line Extension and specifically, the Union Square spur. The missing items include:

I-166-011

- Noise and vibration measurements were only taken on the north side of the Brickbottom Artists Buildings only. The south side of the buildings – which are currently severely impacted by the existing Fitchburg commuter line, and Boston Engine terminal rail head used by Amtrak, commuter rail and PanAm freight cars – has not been given adequate study to establish a baseline for current noise, vibration and air quality.

- Exploration of mitigation and changes in practices in the use of the dead-ended railhead by AMTRAK, MDOT and PanAm.

- Exploration of vehicle mitigation and changes in operations with regard to the Fitchburg Line.

The Brickbottom Artists Buildings have been a point of focus in many of the community meetings held by MassDOT but we worry that the residents of the buildings are being overlooked. There are 220 people occupying the buildings; approximately 180 are full-time, live-in residents. There are 155 units in the buildings. These are people who consider the area home, raise families, pay taxes and are happy to be in the area.

Because the Brickbottom/Inner Belt area has that industrial look and the double onus of being home to those suspect "artists," the area has traditionally been considered a kind of outcast in the Somerville development discussion. This is the opportunity to reverse that stigma and allow the neighborhood to become more integrated into the fabric of Somerville and become an asset in the City's future development.

Sincerely,

Karen Holtzman

Thomas Gardon

4

Project would be more effective in reducing the noise from both Green Line and commuter trains.

Specific modifications to existing Green Line vehicles would be a systemwide effort and may be beyond the scope of the Project. As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes proposed mitigation measures and next steps pertaining to mitigation.

I-166-008

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-166-009

The Green Line Extension will have a positive impact on outdoor air quality within the study area. Indoor air quality is unique to each individual building, and is outside the scope of this project.

I-166-010

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the

evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-166-011

Potential noise and vibration impacts, including impacts associated with railroad operations, were assessed for the southwest facade of the Brickbottom Artists Building abuttings the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Major changes to operations of the Boston Engine Terminal (BET), MBTA Commuter Rail and other railroads, and railroad vehicles are beyond the scope of the Green Line Extension Project. The BET "Drill Track," or the track used to access the BET from the west, will be relocated approximately five feet further from the Brickbottom Artists Building as part of the Green Line Extension Project.

EEA# 13886

Green Line Extension 1/6/10

Dear secretary Ian Bowles,

Having the Green Line extend into Somerville is a wonderful idea. Currently, traveling around this city is limited by having very few train stations. As a teen, I find the "T" extremly useful for my everyday life. I use the train to go to school, hang out with friends, and go to my work. Convenity for me, I live really close to the Davis Square "T" stop, but for many of my friends this is not true. Lack of public transportation has limited them from getting jobs, attending events, and gaining independence.

I would love to see many benches

I-167-001 For the Green Line, I would love to see nice waiting areas. Many benches would be great, along with lights near the benches and stops so people feel safe. Also, having the police moderate the stops would increase

I-167-001

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs, which includes enclosed headhouses, alternate fare collection, and waiting areas. Detailed designs for each station, including locations of amenities such as canopies, benches, security features and lighting, will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-167-001

Safety, bringing in more ~~[illegible]~~ riders.

Thank you so much for reading! I can't wait for the Green Line Extension in Somerville!

~~[illegible]~~ Sincerely,

Olivia Hural, 17

Senior, ~~[illegible]~~

Prospect Hill Academy Charter School

Somerville, MA 02145

Johnson, Holly (EEA)

From: Jared Ingersoll [jaredingersoll@yahoo.com]
Sent: Thursday, January 07, 2010 8:20 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Comment Letter (EEA #13886)
Attachments: EEA-13866_Jingersoll_Comments.pdf

Dear Ms. Johnson,

Please find my comment letter for Secretary Ian Bowles containing comments on the Draft Environmental Impact Report.

Thank You,

Jared Ingersoll
176 Mystic St. Ext
Medford, MA 02155

176 Mystic St. Ext
Medford, MA 02155
January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

The purpose of this letter is to provide comments on the Draft Environmental Impact Report (DEIR) for the Green Line Extension Project through Somerville to Medford, EEA #13866 and to offer my support for the full build of this project both to Union Square, Somerville and to Rt. 16 in the Medford Hillside as a single project to be completed by December 31, 2014. While there are many elements to the DEIR that warrant comment, most of mine will revolve around the portion of the project the impacts Medford, the incompleteness of the DEIR as currently submitted, and ultimately, my recommendation that the DEIR should NOT be accepted as the Final Environmental Impact Report.

College Avenue

I-168-001 | I-168-002

According to the EENF certificate, the State of Massachusetts is legally bound to extend the Green Line to serve the Medford Hillside by 2014. Unfortunately, a College Ave terminus does not do this and does not serve the Medford Hillside. The intersection of College Ave. and Boston Ave. is historically College Hill and just the edge of Medford Hillside, and many of the residents within the Hillside are nearly a mile from the proposed station. In addition, the traffic patterns of this intersection are already troublesome and adding car drop-off and feeder-busses to this congestion will adversely affect local air quality, noise and traffic conditions and make an already dangerous intersection even more dangerous.

In addition to a terminus at this location not fulfilling the intent of the EENF, the additional track layout and construction involved in terminating the Green Line here will drop it right in the middle of a densely populated residential neighborhood instead of a mostly commercial area nearly a mile down the track at Route 16.

Winthrop Street

I-168-003

For unexplained reasons, the proposed Winthrop Street Station disappeared from the planning early on in the process. The reason given was general community feedback that

I-168-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-168-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-168-003

this station was unwanted when the proposed station was presented at community meetings. This reason is very suspect as the consensus from people in the community who attended those meetings was there was no such sentiment. It is likelier that the station was dropped as it was too close to the College Ave station, which will be the gateway to Tufts University and a realization of a T stop that the University has been seeking for years. Had this station been included, it probably would have satisfied the EENF certificate which required that the Medford Hillside be served by this project.

Route 16, Mystic Valley Parkway

I-168-004

One of the overall weakest areas of the DEIR is the planning that has been done around Mystic Valley Parkway and Rt. 16. In the document, the terminus outline takes four commercial properties in both Somerville and Medford in what has been described as a 'worst case scenario'. The Medford Green Line Neighborhood Alliance conducted an independent analysis and discovered by slightly changing the trajectory of the tracks, a terminus could be fit into the existing right of way, thus avoiding the taking of any commercial property in that area. This did not take extensive hours of study or advanced engineering, it was done by reviewing the public materials and surveys that had been furnished by state agencies to that point. Because of this, it leaves one under the impression that not much thought or effort was put into designing this particular location, and was included largely as an afterthought.

Leaving the commercial properties in tact at Rt. 16 gives Medford its best chance at transit oriented development in that area as 196, 200 and 222 Boston Ave have tremendous potential as commercial properties at the end of the Green Line. In addition, they are an important tax base for the City of Medford and should be left in tact.

The potential for ridership at Route 16 also makes it a strong terminus that should be included in the first phase of the project, with almost 10,000 people living within a 10 minute walk of that location. Extending the line this far in the first phase gives the state of Massachusetts its best shot at conforming to the air quality targets that this project must meet to comply with the Clean Air Act, targets that if not met jeopardize federal funding for other transit projects in Massachusetts, including highways and bridges. In addition to better ridership, a Rt. 16 would serve several Environmental Justice communities. Both factors make this project a more completive application for Federal New Starts monies.

Mitigation and Details

I-168-005

In addition to poor choices like commercial property taking at the terminus, the DEIR is short on details and specifics about mitigation materials, methods, station designs and accessibility. The DEIR should be more specific about plans for these areas, as it will engender more support in the community and the City of Medford for this project. It would also be a good idea to implement mitigation prior to the building of the stations, the moving of the commuter rail tracks, and the installation of the Green Line tracks to better help control construction noise for abutters of the rail line.

I-168-003

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

I-168-003

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

I-168-004

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-168-005

MassDOT has developed proposed mitigation measures / draft Section

Finding the money for Route 16.

I-168-006

One of the stated rationales for removing the Route 16 station project and putting it into a second phase is funding. In order to make the project more competitive for Federal New Starts funding, this final phase was removed and tied to State highway project money to make the overall cost of the project more attractive. It is my belief that the money for the route 16 terminus can be found in the project by reducing some of the design inflation and additional projects that have been included that do not relate to improving air quality and reducing automobile trips in the area.

The first inflated expense in the DEIR is the oversized maintenance facility. MasDOT has been given a maintenance facility that will house the Green Line trains for nearly the entire Green Line, not just the extension through Somerville to Medford. The maintenance facility should only house trains that service the ridership on the two lines that will travel to Union Square and Medford Hillside, and should not be sized to support the vehicles for the entire transportation trolley line. Even if this facility is 40% oversized, there is certainly savings to be found there.

After design of this project had begun, the commercial North Point development and Lechmere relocation funding fell through, and MasDOT was forced to assume the $100 million cost of building a new Lechmere station. This cost roughly covers the cost to extend the Green Line from College Ave and putting the terminus in the first Phase at Route 16. The state should find new private partners to develop transit oriented development at Lechmere to re-assume some of the costs of that station.

Conclusion

I-168-007

I-168-008

Because of the design deficiencies and limited detail critiqued above, it is my opinion that the Draft Environmental Impact Report (DEIR) should NOT be accepted as the Final Environmental Impact Report (FEIR) as the DEIR fails to fulfill the requirements as set forth in the MEPA certificate on the Extended Environmental Notification Form. While I support Massachusetts Department of Transportation's designation of Mystic Valley Parkway terminus station, with no parking, as the Preferred Alternative, the DEIR both fails to fully analyze and design the station to minimize impacts on the surrounding neighborhood, maximize the benefit to the community AND does not include the project as part of the Phase 1 build. This project should be built at one time to Mystic Valley Parkway to fulfill it's promise to the communities of Somerville and Medford.

Thank you for your time and consideration

Sincerely,

Jared Ingersoll

61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-168-006

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension. Some additional capacity is provided for future system growth.

Efforts to engage a developer for the NorthPoint development will continue as the Green Line Extension Project advances.

I-168-007

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-168-008

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: shuba iyengar [shuba_iyengar@yahoo.com]
Sent: Wednesday, January 06, 2010 5:57 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension project
Attachments: Glass_F_T_letter_1-6-10.doc

Dear Holly Johnson,

I hope that you are doing well and having a nice week. I am a resident of the Glass Factory Building and have attached a letter (MS Word) voicing my concerns with the current MBTA Greer Line Extension plan.

Please do not hesitate to contact me if there are any questions or concerns.

Thanks again,

Shuba

Shuba Rajashri Iyengar

1

Shuba Rajashri Iyengar
169 Monsignor Obrien Hwy, Unit 405
Cambridge, MA 02141

January 6th 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am an owner at the Glass Factory Condominiums. I am very concerned about the Green Line Extension Project.

I-169-001 We live on the 4th floor of the building facing the MBTA property. The current plan has the tracks running approximately 30 – 50 feet away from the building. This is very concerning as it will have major repercussions for the other residents and I who have windows facing these tracks. These tracks will obscure the light, which affects our quality of life on a daily basis. This will also effect the property value of the unit, and many of us are likely to have significant decline in property values.

I-169-002 The trains, along with the buses, will also cause extreme noise and vibration problems. The DEIR lists us as severely impacted. With the current plan there is not adequate space to build a barrier wall, making this a major concern. The T currently does not have a sound plan to address these concerns. It is important that the MBTA do everything possible to address these issues. This includes considering the possibility of running the T tracks at ground level at an adequate distance away from the building and having the bus depot remain on Obrien Highway. Unless these issues are addressed in detail, they will severely impact the daily lives of the current residents.

I-169-003 I strongly oppose having a new maintenance facility behind our building. The existing noise and light (through the windows at night) is already a current issue, especially on the existing MBTA property (in the morning, they often use the loudspeaker which can be loud). The flood lights already cast light through our windows. It is important that the noise be kept under a reasonable threshold, as it will prohibit us from sleeping well. My husband and I both work in the medical field, and not resting well can have an impact on our ability to care for our patients. In addition, putting the Mirror H Option behind our building will effectively destroy any further development in North Point. Given this, I support option L as a better choice.

I-169-004 There are several other major issues. First, the proposed station is not of adequate quality for our neighborhood. This will affect existing property values. Next, there is not adequate trees and greenery. The existing trees have served as a nice barrier behind our building. Adding more parking (i.e. the corner of East Street & O'Brien should not be surface parking) and eliminating the trees will exacerbate this problem.

I-169-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-169-002

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 5, Lechmere Station, described the proposed station, roadway and busway. It also describes proposed mitigation measures, including a noise barrier on the elevated structure near Glass Factory.

I-169-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-169-004

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan

I cannot emphasize enough my concerns over the existing MBTA design for the T station and line (tracks and buses). I implore you to deeply consider our concerns as this will have a major impact on our current quality of life.

Please feel free to contact me if there are any additional questions.

Sincerely,

Shuba Rajashri Iyengar
Phone 617 494 8182

(PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

HJ

January 5, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-170-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own

I-170-001

Please see Comment Letter I-002.

estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.



Erik Jacobs
75 Capen St. #2
Medford, MA 02155

Mark H. Jaquith
213 Hurley Street
Cambridge, Massachusetts 02141



Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Email: Holly.S.Johnson@state.ma.us

Fax: 617-626-1181

Comment on DEIR concerning Green Line Extension Project,

I will preface my comment with a strong statement of support of well thought out expansion of rapid transit in general, and this project in particular.

As a resident of East Cambridge and frequent rider of trolleys and busses to and from Lechmere Station, my comments will concern changes in that area of the project.

Crossing O'Brien Highway

I-171-001

The relocation of Lechmere Station to the north-east side of the Monsignor O'Brien Highway represents a major hardship to be endured by the residents of the East Cambridge neighborhood located on the south-west side of said highway. This burden will, of course, be felt most by my senior and physically challenged neighbors. This move will also have the effect of leaving more developable land in the in the area due to the abandonment of the present station.

When this move was first pitched to us by the old DOT and the North Point development partners, we were being offered a raised, covered, heated walkway over Route 28 and a fabulous new station to be built by the developer. With the demise of the development partnership, these promised amenities have also evaporated. The significantly longer trip to reach the station will now necessitate the crossing of a major traffic artery at grade to get to a bare-bones station. Many residents are dreading having to cross six or seven lanes of traffic to get to the MBTA.

I-171-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

Mark H. Jaquith
213 Hurley Street
Cambridge, Massachusetts 02141

I-171-001

I have not yet seen a good scheme to safely manage the millions of expected pedestrian crossings of Route 28. It is clear that the First Street crossing will be the most heavily used, and there is considerable improvement over MASS DOT plans shown in the East Cambridge Planning

Team's Lechmere Square Working Group plan. There will, however, be considerable numbers of people approaching from residences and businesses on Cambridge Street. Most of these folks will approach via either Second or Third Street, and crossings to accommodate this foot traffic are no less important. To date, there has been no comprehensive plan to deal with traffic and pedestrians on Route 28 between First Street and the Twin Cities shopping center.

I-171-002

I have heard one very good idea that addresses both the added distance to the station and the crossings. The vehicle (pun intended) to accomplish this is the bus circulation pattern near the station. Presently, the 69, 80, 87, and 88 bus routes travel east on Cambridge Street between Third and First Streets, and then turn left to loop back on Rt. 28. This results in a counter clockwise bus traffic pattern on Third St., Cambridge St., and Rt. 28.

Now, if that pattern were maintained, by having the 80, 87 and 88 busses turn right onto Third then left on Cambridge we could partially mitigate the distance and crossing issues, possibly improving bus circulation through the new station-all without any extra building cost. Here is how it would work. With all three bus lines traveling east on Cambridge Street, passengers could be transported by these busses from Cambridge Street to the new station safely and at no extra cost. It would work with the Charlie card's built in transfer feature, but since many less well to do riders do not have these, perhaps there should simply be no charge for the trip across the highway to the station from Cambridge Street.

Redevelopment of Lechmere Square:

I fully support the recommendations of the East Cambridge Planning Team's Lechmere Square Working Group plan for the ultimate disposition of the land now occupied by Lechmere Station. See PDF attachment.

I-171-003

The "land swap" plan for the current Lechmere station site with the North Point development partnership that was part of the plan several years ago no longer makes sense, and should be formally withdrawn. This land is a valuable asset, and as North Point has withdrawn its promise to build a deluxe new station, or provide anything of value that can be counted on regarding this project, it is no longer in the interest of the MBTA, DOT, the Commonwealth, the City of Cambridge or their citizens for this to be a part of the plan. The acquisition by DOT of several

I-171-002

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Routes 80, 87 and 88 are expected to enter the station directly from O'Brien Highway via Water Street and not travel to Cambridge Street. The path for Route 69 can remain on Cambridge Street in East Cambridge, with inbound service along North First Street, O'Brian Highway, and Water Street.

I-171-003

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

Mark H. Jaquith
213 Hurley Street
Cambridge, Massachusetts 02141

I-171-003

small scattered parcels as has been suggested is not in keeping with the goals, environmental or otherwise, of this project.

The alternative that has been put forth by the East Cambridge Planning Team's Lechmere Square Working Group, will, on the other hand further these goals.

The proposal would keep all of the commercial development rights on the Lechmere station parcel, as previously permitted by the City of Cambridge, thereby retaining the value in the parcel and therefore its marketability. In addition to generating substantial revenue for DOT to help defray project cost, this plan will offer **substantial mitigation** to the community in which the parcel lies, the City of Cambridge, and the region as a whole.

Some of the advantages of this plan are as follows:

Enhancement to the layout of the commercial development.

Substantial improvement of station design.

Major improvements to pedestrian access and safety.

Traffic flow improvements.

Provision of substantial public open space in a location and configuration far more preferable and usable than in the T plan.

Provision for year-round public market and seasonal farmers market which will supplement and enhance the existing Cambridge Street and First Street business corridors.

Preservation and repurposing of existing historic structures.

Taken together, this is a well thought out, commercially viable, transit oriented development plan in the spirit that both the Commonwealth of Massachusetts and City of Cambridge have been advocating for several years. It also offers the not insubstantial advantage of coming equipped with substantial support and positive input from a community with a well deserved ,and hard earned, reputation of close scrutiny, vigorous public involvement, and when necessary litigiousness regarding development and quality of life issues.

The adoption of this plan would generate enormous amounts of good will and public support from the people and businesses of East Cambridge, the City of Cambridge, and our legislative

I-171-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Mark H. Jaquith
213 Hurley Street
Cambridge, Massachusetts 02141

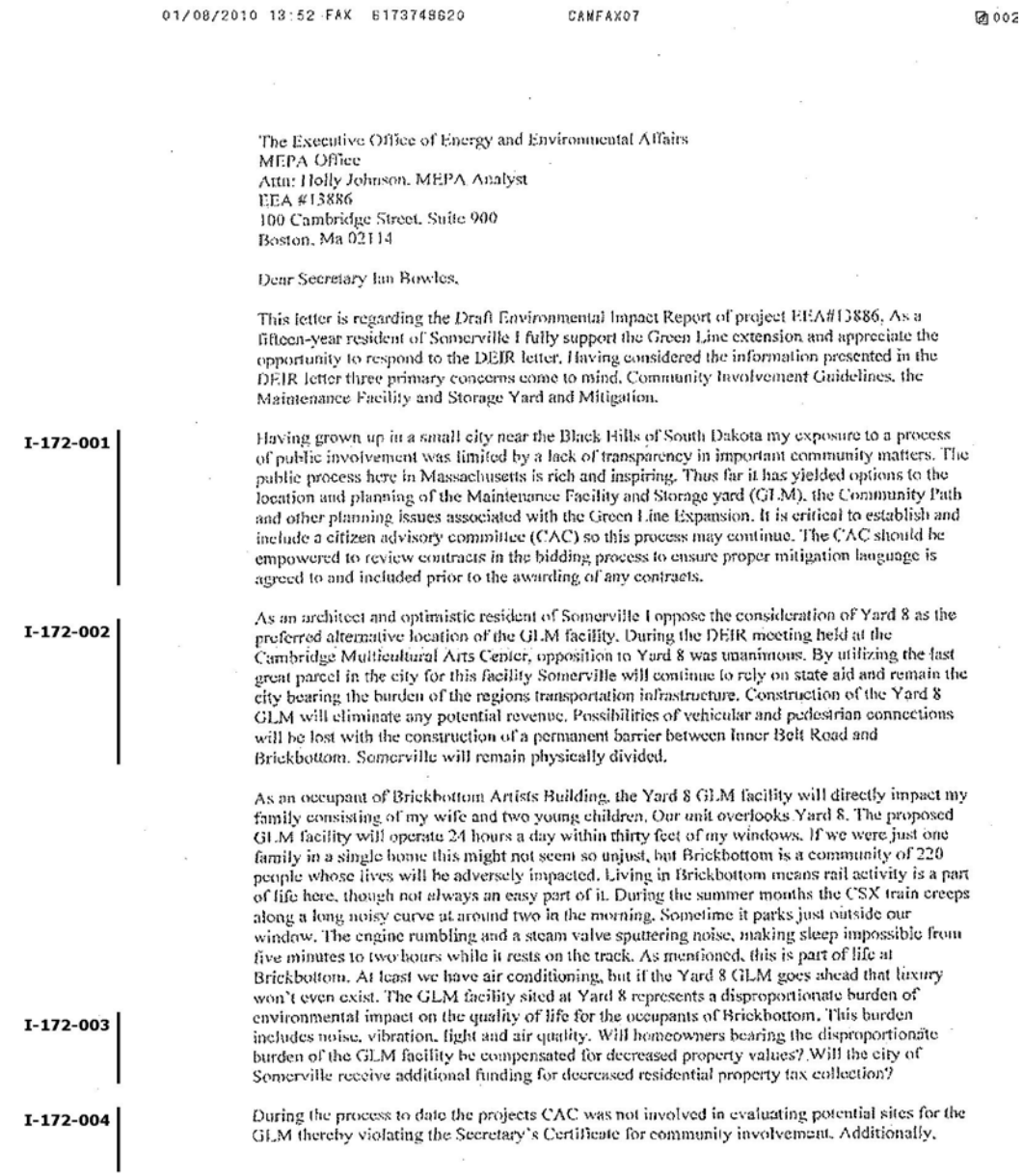
I-171-003

delegation. Indeed, much of the original impetus of the Working Group was to achieve cooperation and collaboration instead of the all to usual opposition and legal battles. I believe that all interests can achieve benefits that vastly out weigh those contained in the current DOT plan

I-171-004

Finally, as this comment is on a DRAFT EIR, I find it unacceptable that the effort to produce a final EIR has not been made to date.

Thank you for your consideration.



01/08/2010 13:52 FAX 6173748620 CAMFAX07 002

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, Ma 02114

Dear Secretary Ian Bowles,

This letter is regarding the Draft Environmental Impact Report of project EEA#13886. As a fifteen-year resident of Somerville I fully support the Green Line extension and appreciate the opportunity to respond to the DEIR letter. Having considered the information presented in the DEIR letter three primary concerns come to mind, Community Involvement Guidelines, the Maintenance Facility and Storage Yard and Mitigation.

I-172-001

Having grown up in a small city near the Black Hills of South Dakota my exposure to a process of public involvement was limited by a lack of transparency in important community matters. The public process here in Massachusetts is rich and inspiring. Thus far it has yielded options to the location and planning of the Maintenance Facility and Storage yard (GLM), the Community Path and other planning issues associated with the Green Line Expansion. It is critical to establish and include a citizen advisory committee (CAC) so this process may continue. The CAC should be empowered to review contracts in the bidding process to ensure proper mitigation language is agreed to and included prior to the awarding of any contracts.

I-172-002

As an architect and optimistic resident of Somerville I oppose the consideration of Yard 8 as the preferred alternative location of the GLM facility. During the DEIR meeting held at the Cambridge Multicultural Arts Center, opposition to Yard 8 was unanimous. By utilizing the last great parcel in the city for this facility Somerville will continue to rely on state aid and remain the city bearing the burden of the regions transportation infrastructure. Construction of the Yard 8 GLM will eliminate any potential revenue. Possibilities of vehicular and pedestrian connections will be lost with the construction of a permanent barrier between Inner Belt Road and Brickbottom. Somerville will remain physically divided.

As an occupant of Brickbottom Artists Building, the Yard 8 GLM facility will directly impact my family consisting of my wife and two young children. Our unit overlooks Yard 8. The proposed GLM facility will operate 24 hours a day within thirty feet of my windows. If we were just one family in a single home this might not seem so unjust, but Brickbottom is a community of 220 people whose lives will be adversely impacted. Living in Brickbottom means rail activity is a part of life here, though not always an easy part of it. During the summer months the CSX train creeps along a long noisy curve at around two in the morning. Sometime it parks just outside our window. The engine rumbling and a steam valve sputtering noise, making sleep impossible from five minutes to two hours while it rests on the track. As mentioned, this is part of life at Brickbottom. At least we have air conditioning, but if the Yard 8 GLM goes ahead that luxury won't even exist. The GLM facility sited at Yard 8 represents a disproportionate burden of environmental impact on the quality of life for the occupants of Brickbottom. This burden includes noise, vibration, light and air quality. Will homeowners bearing the disproportionate burden of the GLM facility be compensated for decreased property values? Will the city of Somerville receive additional funding for decreased residential property tax collection?

I-172-003

I-172-004

During the process to date the projects CAC was not involved in evaluating potential sites for the GLM thereby violating the Secretary's Certificate for community involvement. Additionally,

I-172-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-172-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-172-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. Mitigation measures for the College Avenue and Lechmere Stations are further described in FEIR Chapters 4 and 5, respectively. The mitigation measures and steps required for implementation and post-construction monitoring required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project

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I-172-004

mandated land use planning was not performed. Mirror H and Option L are viable alternatives to the preferred site. These alternatives deserve further serious analysis and consideration. Why does a decision need to made now regarding the location and design of the GLM if the planning and design of the facility is not contingent on the 2014 Green Line Extension completion deadline?

I-172-005

Mitigation should include a process to address problems during construction and after the fact and there must be a way for residents to seek redress if specific goals are not met. Mitigation of noise and vibration must be addressed and in place prior to construction. How will future upkeep of MBTA facilities impact mitigation? How will the proximity of two spurs flanking Brickbottom be addressed? In light of the existing noise MassDOT should assign five new EPA level 3 diesel rail engines to the existing Fitchburg Line to mitigate the overall environmental impact to the immediate area. The new Green Line railcars should be fitted with quiet fans and acoustical absorption to mitigate noise and vibration. If the Yard 8 GLM facility is constructed as planned I would like to see a year round earthen living wall twenty feet in height to mitigate the environmental impact of the facility.

I fully support the Green Line expansion and required facilities essential to its success. For myself as an architect, the beauty of Boston is that a perfect site with ideal conditions rarely exists. The most elegant solutions come from the careful consideration of old and new. Yard 8 seems all too perfect, as perfect as Government Center without the destruction of Scollay Square, or as ideal as cutting a swath through the city of Boston for I-93. Using Yard 8 for the GLM facility will devastate a city struggling to make life better for residents and businesses.

This is an opportunity for Massachusetts to set an example of exemplary railway and facility planning for a country grappling with local and regional transportation concerns. It is also a chance for individuals like you to have a positive impact of the history of the Boston area. Please consider the alternatives to Yard 8 and the impact to Somerville and the residents of Brickbottom.

Thank you for your commitment to this project and your consideration.

Sincerely,

Roger S. Johnsen

Roger S. Johnsen

workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-172-004

As described in the DEIR/EA Section 1.5.3, throughout the development of the DEIR/EA regular coordination with the Advisory Group and local municipalities on various aspects of the Project, including siting of the maintenance facility, occurred. During the Summer of 2008, tutorials on the proposed maintenance facility as well as site visits to existing maintenance facilities were conducted for Advisory Group members. In December 2009, a public meeting was held on the various maintenance facility sites.

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

I-172-005

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

Johnson, Holly (EEA)

From: Robin Johnson [johnson.robin@gmail.com]
Sent: Wednesday, January 06, 2010 12:23 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886 - Green Line Extension Project

Dear Holly,

I-173-001

I am writing in support of extending the Green Line to Route 16 in Medford. Extending the Green Line through this dense urban corridor would improve air quality, energy efficiency, traffic, and general quality of life. Together with a planned bike trail along Route 16 to Alewife, the green line would greatly improve access to public transportation in this underserved area. As a resident of East Arlington, I would benefit from a Green Line that terminated at Route 16. If the Green Line ends in Somerville, tens of thousands of people in West Medford and Arlington (including me and my family) would not have access to this line.

The MBTA is facing severe budget issues and is considering scaling back this project. That would be a mistake. The state of Massachusetts and MBTA need to figure out how to fund vital extensions such as this while improving maintenance of the existing infrastructure. The Green Line project needs to include an extension to Route 16 now, not as a possible later phase. Boston's future as a world-class city depends on it.

Robin Johnson
26 Chandler Street
Arlington, MA

1

I-173-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Justine Kahn [justine_Kahn@projectbread.org]
Sent: Monday, January 04, 2010 9:48 AM
To: Johnson, Holly S (ENV)
Subject: Draft EIRJanuary 4, 2010 EEA #13886.
Attachments: DEIR_Letter.doc

January 4, 2010

Secretary Ian Bowles Executive
Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-174-001

I strongly support the Green Line extension but feel that the greatest economic and environmental benefits can only be gained by constructing the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16). Because of this, I urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the most cost effective, time efficient, and environmentally sustainable project possible.

According to the DEIR, MassDOT intends to build the green line extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014. Yet, the College Avenue station is not designed for the additional requirements of a terminus, and the neighborhood cannot sustain the impact of a terminus station operations and traffic volume. In addition, I feel very strongly that this decision does not meet the state's legal obligation to provide public transit services to Medford Hillside. In order to properly serve Medford Hillside, the project must extend all the way to Route 16.

I-174-002

Unfortunately, the Route 16 station design outlined in the DEIR is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance (MGNA), a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment.

Finally, the current two-phased approach is fiscally irresponsible, as there are significant efficiencies gained from completing the project in one phase. This is why it is of utmost importance to reject the current DEIR and require Mass DOT to correct the Environmental Impact analysis including an evaluation of MGNA's alternative design for the Route 16 station.

Thank you for your consideration

Sincerely,

I-174-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-174-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area

Justine Kahn
17 Orchard Street, Apt 2
Medford, MA 02155

planning issues.

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

RECEIVED

JAN 8 2010

MEPA

Stephen H. Kaiser
191 Hamilton St.
Cambridge Mass. 02139

To : MEPA Unit, Executive Office of Environmental and Energy Affairs
Ninth floor, 100 Cambridge Street
Attention : Holly Johnson

From : Stephen H. Kaiser, PhD.

Draft Environmental Impact Report for Green Line Extension in Cambridge, Somerville and Medford , EEA # 13886 Comment #1

Maintenance Facility Alternatives, Trackage Design, New Lechmere Station with Pedestrian Access and North Point Considerations

Of all the transit projects proposed by the MBTA in the past decade, the extension of the Green Line through Somerville makes the most sense. Thus the issues become how is the extension achieved, by which alternative, and on what schedule. The issues for MEPA are the selection of alternatives and identification of environmental impacts, and suitable mitigation.

1 PROCEDURES

I-175-001

The original DEIR submission included a request to accept the Draft EIR as a **Final EIR**, in effect rolling over the document. EOT in its submission last year may have hoped that MEPA would waive the need for a Final EIR. I think the three key remaining issues are sufficiently controversial and intense that they require resolution and response in a Final EIR. However, much of the DEIR material can be included directly within the FEIR. Any new materials in the FEIR can be in effect an addendum to the DEIR, with certain new replacement chapters, such as Maintenance Facility alternatives.

2 Green Line History

The DEIR discussion of project history is regrettably too brief. Admittedly, ideas and proposals go back to the period of BTPR in 1970, and have historical value only. But there

I-175-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

are several key historical events that have relevance to the future of the Green Line extension.

First is the **agreement** between state transportation officials and the Conservation Law Foundation for a major mitigation program stressing mass transit projects as a counterpart to the proposed Central Artery Depression. A key press conference at 3 Joy Street in December 1990 brought together Fred Salvucci, CLF's Doug Foy, the state Highway Commissioner, the regional Director of the EPA, and other Dukakis administration allies to support a multi-billion dollar transit master plan of commitments. The MBTA was noticeably absent.

A consequence of this effort was CLF's continued efforts in following years to seek inclusion of key transit projects in the State Implementation Plan for air pollution control, overseen by EPA. Fred Salvucci remained a supporter of the overall plan. The MBTA remained in opposition. The Green Line extension was an element of that plan, and the SIP commitments remain a driving force for the completion of the Green Line, including the deadline of 2014. Environmental laws are often criticized as a mechanism to slow down or prevent construction, but in the instance of the Green Line they were used to encourage, support and accelerate a construction project.

The second historical event was the 1999 **agreement** between MBTA and the North Point developers to have a public-private partnership whereby the developers would pay for and build the Lechmere station relocation with associated elevated structures, and in exchange the MBTA would give them six acres of land the MBTA owned in North Point. This agreement was amended in 2000 to become less binding on the developer. All aspects of this arrangement were secret and did not involve an open process. The agreement is still legally in effect, but the MassDOT is free to make other arrangements, which it has.

The third historical event is the submission by the developers of **North Point EIR #** 12650 in 2001 and receipt of a **special permit** for development from the Cambridge Planning Board. Both the special permit and MBTA agreement remain legally in effect, although the project design and the status of development and land ownership has changed considerably.

The DEIR does recognize the "rebirth" of the Green Line beginning with the 2004-2005 state studies and actions by the City of Somerville to make the Green Line a priority. The MBTA also became more enthusiastic, as other projects such as the Silver Line tunnel and Urban Ring began to lose public credibility and support.

The DEIR gives brief recognition to the breakup of the **developer team** at North Point in 2007, and the collapse of agreements to relocate the Lechmere station. I advocated for a state takeover of the Lechmere work, as did the City of Somerville. My proposals for further resolution of the Lechmere and North Point issues are contained in Comment section 10 below.

I-175-002

A different type of historical interest is the recognition given to **historical sites**. The DEIR on page 4-87 recognized two railroad corridors : the MBTA Lowell Line and the MBTA Fitchburg Line as active rights-of-way. In fact the Lowell Line is the first rail line to enter the Boston area from the North. The Boston & Lowell railroad was chartered in 1830, the land takings were made in 1833 and 1834, and the first rail operations were in 1835. An abandoned section of this right of way is found east of the Fitchburg tracks heading towards Lechmere, and it is now overgrown with trees. This section might yield artifacts of original railroading in the 1830s. I concur with the recommendation of the EIR that the corridor not be considered for formal historical designation.

3 Three major issues

The Green Line extension is ideally suited for new transit service because the ridership population is already in place, with generally good walk-in access. Most of the right-of-way already exists. Historically rail operations served East Cambridge and Somerville.

I see three primary controversies in the Green Line extension. One is the location of a terminus, with possible extension to Medford. The second is the location and design of the Maintenance and Storage yard. The third is the design of the relocated Lechmere Station and related road & development issues in the North Point area.

The Green Line proposal comes with general support from the City of Somerville and its residents, strangely limited support from Cambridge, and mixed reactions from Medford.

4 Medford Terminus

The approach of MassDOT to the Medford extension issue is reasonable given the controversy. Staged construction would allow Green Line service to function in Somerville while separating out the Medford issues for later resolution.

I-175-002

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

5 Maintenance facility general alternatives

State transportation officials have approached the EIR process with excessive rigidity concerning the proposal for a Yard 8 design, with no other alternatives to be discussed. Few people had anticipated the size and scale of the facility proposed for Somerville.

The DEIR does not clarify the scope of the maintenance operations on the Green Line. The size of the facility in Somerville needs more explanation and justification. Everything may indeed be needed, but I cannot tell from the information in the EIR.

I-175-003

The relation to the Riverside facilities needs explanation. In February 2009 the MBTA Board of Directors approved an 85-year lease to allow a developer to construct over 400,000 s.f. of office space, 200 housing units and 60,000 s.f. of retail on part of the Riverside site. State officials have presented an awkward scenario where it appears that Newton may gain development and tax base benefits, while Somerville's Inner Belt Industrial Park may suffer a loss of taxable land area. The Final EIR should explain the arrangement and the comparison of existing and future conditions for both Somerville and Newton in terms of maintenance and storage capabilities, as well as development leases.

The Yard 8 situation has changed considerably since the preparation of the Draft EIR :

> "Of the numerous sites considered in the screening process, only Yard 8 with the Adjacent Parcel is of a sufficient size and configuration to effectively store the required cars and house a support facility while providing the operational flexibility that is needed for such a facility without additional environmental impacts." (ES-25)

The location of the maintenance building within the industrial park and proximate to the Brickbottom apartments became a major point of contention which doomed the acceptability of Yard 8. An additional technical flaw was a track design which was inadequate in terms of Green Line operations and safety.

The Mirror-H alternate proposal sponsored by Somerville would be primarily in Somerville and partly in Cambridge, although no one is exactly sure where the city boundary line is in this area of North Point. Cambridge took objection to the changes affecting its North Point Plans. There were also problems with the trackage design as shown.

I-175-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

This logjam in site selection was broken by an important initiative from former Secretary Aloisi, after discussions with delegations from Somerville. As a result, the project consultants produced a new evaluation of alternate sites in their December 9 report -- issued a month after the DEIR. The December 16 meeting in Cambridge seemed to show general preference for Option L, located away from Brickbottom and Yard 8.

Option L has the advantage of allowing better track movements in the Yard 8 area and moving large structures away from residential areas, such as Brickbottom. However, there are disadvantages as well : two large, modern and serviceable industrial buildings would need to be taken and demolished for Option L, at a cost of $50 million. Somerville would lose jobs, tax income and development capability of these sites. In addition, two functional buildings would need to be demolished and turned to rubble, creating a large amount of waste materials for the state's limited landfills. In addition, there are questions of the appropriate use of eminent domain by public authorities, whereby private property can be taken without the owner's consent.

These problems with Option L were of sufficient importance to stimulate the search for an alternative which would share the advantages of Option L but share none of the disadvantages. Citizens, business leaders and city leaders became engaged in this effort in the hope that transit needs could be met without undue impacts to the Industrial park area.

From this ad hoc effort came the generation of a new concept plan called Mirror-L, which indeed was a variation in Option L with lesser impacts to the Inner Belt Industrial Park. The basic concept was to utilize vacant space in the vicinity of existing freight rail tracks. Part of the plan was to consider structured parking for the BET lot, to provide equivalent parking on half the footprint.

Today, there is a five track corridor of curved freight tracks curving between the industrial park and the Boston engine terminal. The CSX track is commonly known as the Grand Junction route, while in combination with B&M tracks the area is called the Valley tracks. The Mirror-L plan would use 3 to 4 of these underutilized tracks as well as half of the BET parking lot to locate the Maintenance Building. There would be a curved spine of storage tracks for Green Line vehicles.

This conceptual design would be able to avoid the $50 million landtaking within the industrial park, would require acquisition of three to four siding tracks from private railroads, and half of the BET parking lot, to be replaced by a deck structure offering

equivalent parking. Within the industrial park, the only taking would be from underutilized parking lots. No structures would be taken. The acquisition of railroad track land that is not highly utilized can be viewed as income to the railroads. The parking garage and landtakings costs would appear to be approximately $5 million, so that the net capital cost saving relative to Option L would be $45 million. The maintenance yard would add 100 jobs to the area, with no loss of jobs and no loss of tax base.

I-175-004

The essence of my comment to MEPA for the DEIR is that there appears to be a credible alternative to the location of the Maintenance Building and storage yard. Additional design and review work will need to be done to verify any claimed advantages and unresolved disadvantages. I am hopeful that MEPA will encourage MassDOT to investigate the Mirror-L alternative closely and to report their findings in the Final EIR.

The Green Line extension into Somerville will also result in a conflict with an existing and functional rail connection between B&M freight service in the Lowell corridor and the Valley tracks as they connect to CSX tracks connecting to Charlestown and Chelsea. Although I cannot find specific discussion in the DEIR, it is my understanding that this track is definitely removed by a Yard 8 and Option-L scenario, and may be lost with Option Mirror-L. However, it appears that Mirror-H may not interfere with this track connection.

It is my understanding that the proposed mitigation for the loss of this track is to open up an existing but unused track that passes through the industrial park at-grade, with an at-grade crossing of Inner Belt Road. This corridor is also know as track 10. Active use of track 10 would introduce the noise and smells of locomotives to an area which has a quieter environment today. The reintroduction of train travel through the industrial park is seen by Somerville as a further intrusion into this land area and its current setting.

I-175-005

Already additional thinking has begun on alternatives to reopening Track 10. One option is a track connection to the existing Lowell line embankment. A grade change and use of retaining walls would be required. Another option is to design the new Green Line service tracks to fit around the Lowell-to-Valley track connection, and to allow this existing connection to continue functioning without the need to use track 10. As with Mirror-L, these options require further design and review. I hope that MassDOT can consider them in their responses to comments in the Final EIR.

I-175-004

A detailed response to the "Mirror-L" storage and maintenance facility concept is included in the Appendices to the FEIR. An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-175-005

The expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives, provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis, includes a discussion on railroad connections in the area of the proposed storage and maintenance facility. A detailed response to the "Mirror-L" storage and maintenance facility concept is included in the Appendices to the FEIR. The yard 10 lead track will continue to be used by the MBTA as is the case today. The Wiley track to the Valley tracks will be removed from service before construction begins on the Green Line Extension Project.

6 Trackage Design and Green Line operations

One of the key design flaws in the Yard 8 proposal was its failure to provide for safe and efficient reversal of direction of Green Line trains. For example, to get to Union Square, a train leaving Yard 8 would be required to reverse direction twice. These movements would require each train to stop while blocking the mainline tracks in one direction, and then traveling backwards on that track before switching over directly into the opposite tracks which would also be blocked at this time. The only other way to make this move is even worse : to switch directly over onto the opposite tracks and travel briefly in the wrong direction, before stopping and reversing.

This design feature is most undesirable for two reasons -- it presents obvious safety problems, and it causes undue interference with mainline Green Line service. The safety problems would present environmental problems to the extent that reliable and safe transit service is essential to the public policy of providing quality transportation alternatives to the use of automobiles in greater Boston. The operational problems are crucial because of the history of difficulties in achieving smooth flow and consistency of good performance on the Green line. Bunching of trains, delays and crowding of trains are all features which must be kept to a minimum in a well-run system. The stoppages and delays introduced by the switching operations associated with the Yard 8 plan would appear to move backwards away from better operations on the Green Line as a whole.

I-175-006

The Yard 8 plans fails to include a center service and switching track to allow safe and effective reversal of train direction. Such a track is a standard feature on many transit systems -- for example the center track on the Boston College branch at the Kenmore Square portal. The central service track should be an element of every maintenance yard proposal. Unfortunately, none of the current designs include such a feature.

The issue of safe train reversal should be discussed in the Final EIR.

I-175-007

The controversy over the Somerville maintenance yard opens up the possibility for a more comprehensive evaluation of system operations on the Green Line. Years ago, an MBTA official told me that the MBTA had given up on the Green Line because no one could understand it. With the Green Line extension to both Union Square and Medford, the Green Line system is larger, having six branches rather than four. It will probably be more complicated to operate. We need an excellent understanding of how the Green Line could and should work.

I-175-006

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-175-007

The proposed Green Line Extension operation will extend the Green Line D Branch to College Avenue and the Green Line E Branch to Union Square. During the preliminary engineering phase of the Project, a computer simulation will be performed to model the proposed extension with the central subway. The simulation will be used to design the signal system for the extension that will optimize Green Line operations.

If that understanding has not been achieved in the past, let us obtain that understanding now, and what better place than in the Final EIR. It is time to seek the equivalent of a D'Alessandro report on train operations. A poorly operated new rail extension could damage the rest of Green Line operations.

I-175-008

A good form of operational mitigation would respond to some of the neighborhood complaints about existing rail operations, that the commuter trains are noisy and smelly. The MBTA locomotives are F-40s, which are old and reliable, but also noisy and polluting. It would be a poor investment for the MBTA to retrofit these locomotives for reduced noise and emissions. However, the MBTA does have an order for new commuter rail locomotives to replace its aging fleet. The mitigation could take the form of assigning 4-6 of the new locomotives to the Lowell line as soon as they are delivered to the MBTA.

I-175-009

Construction noise may also be a problem, so these operational changes to commuter rail would be reasonable for residents who would life next to both a commuter rail and LRV system. Another form of simple mitigation would be to find a way for the Amtrak Northeaster trains to idle somewhere else than on the Fitchburg tracks immediately adjacent to the Brickbottom apartments. It should be possible to find another layover area for the Amtrak F40s that right next to a residential building.

7 North Point History and the Hazards of Elevated Structures

Many of the issues in Somerville appear to be open for discussion and debate, and this situation is very encouraging because it suggests a possibility for resolution. The atmosphere around Lechmere is much less promising because of the long history of planning problems in the area and the fact that leadership from the City of Cambridge is not equal to what we have seen from Somerville.

The primarily flaw in the Lechmere plan is its dependence on the extension of an elevated transit line. This "city planning" initiative is being made in contravention to all that we have learned about the dangers of elevated transportation structures and the terrible costs of later regrets when we try to undo the damage.

Historically the construction of elevated highways and transit has been recognized as a fundamental planning error in virtually every city where it has occurred. The lessons of the past 50-100 years have been to avoid elevated structures and to take down the ones you have.

I-175-008

As presented in DEIR/EA Chapter 6, it is anticipated that the Green Line Extension will have a positive impact on outdoor air quality within the study area. Modifications to MBTA Commuter Rail equipment are outside the scope of this project. Noise and vibration mitigation measures are proposed on a location by location basis. Procurement of low emissions commuter rail locomotives is planned by the MBTA for a future date. The procurement will not be included in the Green Line Extension Project. The noise and vibration analysis considered existing rail activities as well as proposed rail activities. Noise and vibration mitigation has been proposed based on the analysis.

I-175-009

Operations of the Boston Engine Terminal (BET), including Amtrak access methods, are beyond the scope of the Green Line Extension Project. The BET "Drill Track," or the track used to access the BET from the west, will be relocated approximately five feet further from the Brickbottom Artists Building as part of the Green Line Extension Project.

The massive Central Artery project in Boston cost $15 billion and a dozen years of construction. It was motivated by a desire to get rid of the elevated Green Monster -- the 1950s elevated highway that sliced through the center of Boston. Originally proposed in the 1930 Whitten report, the elevated artery actually arose from early studies that had recommended removal of elevated transit lines and their replacement by tunnels.

A century ago, there were proposals to build an elevated rail track down Tremont Street in Boston, adjacent to the Boston Common. Opponents drew up drawings showing what the result would look like, and there was massive opposition to the elevated proposal. The result was that a tunnel was dug down Tremont Street and Boston had its first-in-the-nation subway.

Elsewhere the advocates of elevated transit were more successful. The Cities of Boston and Cambridge allowed a private corporation, the Boston Elevated Company, to construct elevated blighting structures along Washington Street, Atlantic Avenue, Causeway and O'Brien Highway. Only the concrete arch structure crossing the Charles river is aesthetically acceptable.

The steel elevated structures of elevated transit have been so ugly and so unacceptable to the public that they have been torn down almost everywhere in Boston (short sections at Leverett and Charles Circles remain). The ugly Lechmere elevated remains in Cambridge -- and Cambridge proposes to extend it! This extension of the elevated is basically Cambridge's plan, and MassDOT has been compelled to accept it.

In Boston the MBTA put the elevated into a tunnel and opened up Causeway. Other cities around the country have tried to remove their elevated structures -- seeking to be more successful that the Big Dig but with similar land use and aesthetic benefits.

Only in Cambridge is an extension of elevated transit being proposed. The EIR notes that "With the exception of the Lechmere Station area, which will be on an elevated structure, there will be minimal visual impact on the area. Because the changes would occur in urbanized areas within and adjacent to the existing right-of-way, they would have little overall visual impact on the public." (p. ES-41) This statement is the closest I could find to a commentary on the visual aspects of elevated structures. The excuses for the acceptability of such structures are very unfortunate, especially in an environmental document.

The setbacks in trying to create a new community of North Point seem to have unhinged whoever wrote these sections of the EIR : "The new Lechmere Station will be relocated and elevated, on a new and realigned viaduct on the east side of Monsignor O'Brien Highway/Route 28. The area around the relocated station is primarily industrial with some residential uses." Where is the realization that the area need not have a grim industrial future? The mental adjustment for new land uses has not been made. The old tolerance for environmental and aesthetic degradation has taken over.

I-175-010

The EIR plan is to remove the elevated steel viaduct crossing over O'Brien Highway, and replace it with elevated steel viaduct passing though North Point, behind the Glass Factory condominiums (elevated at second floor level), over Water Street, and elevated behind the new hotel, before gradually dropping to grade near the Somerville line. This dismal concept makes every past version of the maintenance yard look like a stroke of genius.

I-175-011

The land use problems are compounded by the plan to continue the 234 at-grade parking spaces for MBTA commuters. Why maintain commuter parking spaces within the city and near residential areas?

One party in the discussions understands the important issues in the urban fabric. In regard to elevated McGrath Highway through Somerville, the EIR notes on page 4-22 that "The City of Somerville would like the State to consider removing the elevated segment and replacing it with an at-grade roadway as a way of reuniting the community absent this barrier." So Somerville understands, but where is everyone else?

Cambridge has never explained in any document why the line must be elevated and how long it would take -- how soon after construction the elevated was complete -- for city planners and advocates to raise their voices and demand a tunnel solution. Of all elements of the Green Line proposal, the Lechmere plans are the most primitive.

We should realize that the Lechmere failure was inherited by the state, and not created by them. The longer MassDOT holds on to the original design and does not make improvements, the more the blame becomes their own.

8 Designs At and Around the New Lechmere Station

Of all the unresolved problems of the Green Line design, Lechmere is the worst. The Medford issue is peripheral and does not sink the entire project. The maintenance yard

I-175-010

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a detailed description of pedestrian crossings of O'Brien Highway, as well as proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. In accordance with the Secretary's Certificate on the DEIR/EA, the FEIR includes conceptual station designs. The proposed Lechmere viaduct is required to provide adequate vertical clearances over East Street and Water Street. Just north of Water Street the track transitions to an embanked fill section that descends slightly north of the Hampton Inn and then rises modestly to cross over the Fitchburg line at a level higher than the original Red Bridge to provide adequate clearance to the proposed Union Square loop track below.

I-175-011

The existing Lechmere parking area is an important source of annual revenue for the MBTA. Parking at the new Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station. As stated in DEIR/EA Section 3.7, station designs will minimize light impacts to neighboring properties. As explained in FEIR Chapter 5, design criteria for all Project elements, including lighting and landscaping, and detailed station designs will be developed during the preliminary engineering phase of the Project.

issue looks solvable. The Lechmere project if unresolved prevents any workable extension to Somerville or Medford.

I-175-012

The new street pattern is a product of tired prior planning and reflects a misplaced goal to try to use First Street as a traffic bypass to congestion on Land Boulevard. The result of this unfortunate policy is to point traffic at the dense pedestrian crossing areas of O'Brien Highway and Cambridge Street. This goal makes no pedestrian sense. Any new street system around Lechmere Square warrants a full rethinking for its traffic and pedestrian implications.

9 Improved Pedestrian Access

The EIR in Fig 5.6-Xc provides the raw numbers for pedestrian crossings at all intersections. The year 2030 projections indicate 1700 pedestrians seeking to cross O'Brien Highway in the peak hour and 1400 crossing Cambridge Street. The traffic growth in combination with additional pedestrian demand and the altered traffic circulation plan may actually create conditions worse than they are now, with notable conflicts between cars and pedestrians, especially during the morning peak hour.

As with Yard 8, the DEIR presents only a single design for the Lechmere area, with no alternatives. Such inflexibility and narrowness of perspective is unsuitable for a Draft EIR. No EIR should be considered adequate if it does not look into alternatives and the impacts on major pedestrian flows.

Under current conditions, arriving passengers at Lechmere in the morning pour off the trains and as many as 2/3 of them will cross four lanes of traffic on Cambridge Street. Often the pulsed volume of pedestrians is so great that traffic is stopped by swarms of jaywalking pedestrians.

The morning problem is most severe because of the pulsed nature of pedestrians coming from arriving trains. The pulse may last for 2-3 minutes, followed by 10-15 minutes until the next train arrives. Then the process repeats itself.

Normally, removal of elevated structures is desirable for urban areas, but one consequence of removing the existing Lechmere elevated structure over O'Brien Highway is that the highway sight lines will be opened up, resulting in higher vehicle speeds. Cars driving faster through a dense pedestrian area is precisely a consequence we should avoid.

I-175-012

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-175-013

The EIR contains no photos or discussion of pedestrian conditions at either Cambridge Street or O'Brien Highway. The current plan is little more than taking what is happening today at the Cambridge Street crossing and applying it to O'Brien Highway as well. The Cambridge Street crossing is hampered further by having one crosswalk deliberately left out. There are only three crosswalks, instead of the standard four (Figure 3.7-4).

While MassDOT has honorably accepted the Lechmere responsibilities, their task to upgrade Lechmere planning is a significant challenge. The one positive in the process is that the consultant working on traffic has some familiarity with the site and also has on-staff a skilled expert at dealing with traffic/pedestrian problems -- and who has not been involved in Lechmere planning. His input would be invaluable in resolving the Lechmere pedestrian circulation and safety problems.

I-175-014

An historical note : in both the 1999 and 2000 agreements between the MBTA and the North Point developer, the fundamental concept was for the developer to build a pedestrian overpass crossing over O'Brien Highway. In 2000 the requirements were relaxed, and in the 2001 North Point EIR there was no mention of a pedestrian overpass.

10 North Point proposals

The planning around Lechmere and North Point suffers from several seemingly intractable problems :

1. A complete breakdown in the development team at North Point, including their inability to sell the property as required by Court decree.

2. Continuation of the Cambridge commitment to extend transit on elevated structures, rather than seeking a tunnel solution.

3. An unsafe and uncomfortable at-grade pedestrian crossing of both O'Brien Highway and Cambridge Street.

Other problems such as the obsolete and unworkable special permit issued by the Cambridge Planning Board to North Point and the obsolete 1999/2000 agreements between the MBTA and the developer can be handled more easily. Declare them null and void. Have the MBTA and the City of Cambridge tear them up.

I-175-013

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a detailed description of pedestrian crossings of O'Brien Highway, as well as proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The traffic analysis performed as part of the environmental analysis for Lechmere Station included traffic (vehicle and pedestrian) counts at each of the existing intersections. These volumes were increased based on future area developments to build year 2030. The 2030 volumes were modeled and analyzed for the proposed roadway improvements with a priority given to pedestrians. The roadway improvements proposed provide ample pedestrian crossing locations and times based on the projected pedestrian and vehicle volume.

I-175-014

The roadway and pedestrian improvements proposed for O'Brien Highway in the vicinity of Lechmere Station are the same improvements recommended by the NorthPoint development project. A pedestrian overpass was not included in this project. Based on discussions with the City of Cambridge, which was closely involved in the development of the traffic improvements, a pedestrian overpass was considered but eliminated from further consideration due to site constraints and practicality concerns.

Another complex issue at North Point is functionally separate from the Green Line. The issue of tidelands at North Point is now before the state Supreme Judicial Court, with a decision expected this spring. At issue is the status of public trust rights in tidelands, especially lands declared to be landlocked, as well as ownership of 13 acres of Commonwealth tidelands within the North Point development parcel. This land is represented by the original channel of the Miller's River, as it has since been completely filled in by the Boston & Maine Railroad. The land ownership situation is complicated by the two failed efforts to sell the property when the due diligence stage of negotiations arrived. Many properties at North Point appear to have an undeniable cloud over title, due at least in part to tidelands issues.

I-175-015

It is entirely a legitimate question whether the land is its current state of title disarray can ever be sold. Therefore I suggest that the North Point development land in Cambridge, Somerville and Boston should be acquired by the MBTA. Such property acquisition would automatically clear the title and increase the land value. The land would become developable, subject only to possible requirements for Chapter 91 licenses and legislative action to extinguish public trust rights in tidelands. MBTA could them sell the entire site to a new developer (less space for public roads, parks etc.) as well as its unused six acres in Cambridge. All lands would have cleared titles.

A new North Point plan should be developed in a public process and a new special permit issued by the Planning Board. Rezoning would also be a desirable action.

Two residential buildings S and T at North Point have substantially completed initial construction, although reported sales and occupancies indicate little financial success. Both structures are models for embarrassingly bad architecture and design. I would recommend some effort at finding an architect willing to retrofit and revamp the structures to make them more appealing and habitable.

Another radical and long term option is that the state should consider the possibility of purchasing the Boston & Maine Railroad and then contracting out its operations to CSX. I have been impressed with the activities of CSX both to operate a modern freight railroad carrying containers and piggy-back trailers, as well as working closely with the state on rail issues. I can only contemplate how dramatic an improvement would result from CSX operation of deteriorated B&M properties.

I-175-015

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I hope to submit to MEPA and MassDOT more definitive engineering plans for the maintenance yard alternative Option Mirror-L.

Sincerely,

Stephen H. Kaiser, PhD

cc. Ellin Reisner
Alan Moore
Win Zamore
Stephen Mackey
Barbara Broussard

ADDENDUM ON TRAFFIC CAPACITY MODELS :

The goal of the Green Line project is most worthy in its efforts to serve established urban areas with modern transit and to expand transportation options without reliance on automobiles. Therefore, I have not given a detailed critique of the traffic analysis and modeling for accuracy and impact. However, I would flag concerns with some of the traffic modeling work that has been a problem in the past and continues in this EIR.

I-175-016

Modeling flaws I have found do not appear inherent in the Synchro results. Rather the cause appears related to defective mathematical formulations within the Highway Capacity Manual. These defects I understand are largely known to the programmers of Synchro. The continuing problems with the HCM accuracy for both signalized and unsignalized intersections have been a matter of controversy which the Transportation Research Board bureaucracy refuses to recognize. The Institute of Transportation Engineers has sought to deal with some of them, but not very effectively.

The result is that consultants have chosen to cover up the worse errors by techniques similar to traffic summaries in the text of this DEIR. Examples are references to V/C ratios being more than 1.20 (>1.2) and average delays being greater than 120 seconds (>120) [example page 5-59]. When this technique is used, the reader is not told that the model has given results with V/C ratios as high as 1.65 and delays of 750 seconds or 12 minutes in a left turn slot. This situation is scandalous, and EIRs should not be used as a medium to cover up the extent of the failings in methodologies.

I hope that MassDOT can take action to improve the generic accuracy and honesty of all traffic capacity analyses.

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I-175-016

The traffic analysis for the project was performed in conformance with local, state and national guidelines. All results are presented in the technical appendix as they are calculated by the model.

The traffic analysis preformed is a tool used to determine the impacts of the proposed development. The methodology is consistent for all conditions studied and the impact is mitigated through proposed traffic improvements.

Thank you for your comment.

LATE COMMENT

Stephen H. Kaiser
101 Hamilton St.
Cambridge Mass. 02139

To : MEPA Unit, Executive Office of Environmental and Energy Affairs
Ninth floor, 100 Cambridge Street
Attention : Holly Johnson

RECEIVED

From : Stephen H. Kaiser, PhD.

JAN 11 2010

MEPA

Draft Environmental Impact Report for Green Line Extension in Cambridge, Somerville and Medford , EEA # 13886 Comment #2

Design Concept for Option Mirror-L : Maintenance Facility Alternative in Somerville

I appreciate this opportunity to provide supplementary descriptive material to enhance elements of my January 7 comment to MEPA, relating to the identification and evaluation of alternatives for the MEPA review of the Green Line Extension project. In my initial comment, I identified three major controversies : the extension to Medford, the Maintenance Facility near the rail yards, and the design around and including the new Lechmere station.

The entirety of this second comment will focus on the maintenance facility issue and in particular a new variation on one of the three options presented in the December 9, 2009 report by Vanasse Hangen Brustlin, consultants for MassDOT. Moreover the focus of my comment will be to present an engineering sketch plan of the new alternative illustrating the physical feasibility as to location and operation of the new yard.

I recognize that the EEA office normally does not entertain detailed design review of projects submitted from either proponents or citizens. However, the issue of alternatives is primarily one of preliminary feasibility, of taking an alternative to the point where its elements can be understood and where there is no readily evident fatal flaw. My intent at this point is to present an alternative in sufficient engineering detail that MassDOT and its consultants will be able to report to you with a judgment of feasibility, with stated reasons. The hope is that this evaluation can be presented in the Final EIR, or earlier if that is convenient to MassDOT.

The new alternative is a variation on the concept of Option L -- an earlier plan to locate the maintenance building within the rail yard area, at some distance from residential sites such as the Brickbottom apartments. In the past several weeks, Option L has been identified with certain drawbacks that the new alternative is designed to avoid.

The greatest concern has been expressed over the taking of two large, modern and serviceable industrial buildings at 20 and 48 Third Avenue in Somerville. These buildings would be taken and demolished, as a direct cost of $50 million. Somerville would lose jobs, tax income and development capability. In addition, two functional buildings would be demolished and turned to rubble, creating a large amount of waste materials for the state's limited landfills. These elements of Option L represent undue cost and waste, and detract from many inherently good design aspects of that proposal.

I-176-001

The effort to develop a new alternative has been initiated by an ad hoc group of Citizens, business leaders and Somerville officials who sought a plan to achieve transit goals without undue impacts to the Inner Belt Industrial Park area. In that spirit, I am submitting the attached plan of the new plan, identified as Mirror L. I have further designated the plan as "Version A-1.1" to reflect my view that there may two variations A and B which allow for the location of the transit elements with similar reduced impacts, and to recognize that this plan A is the first iteration of the initial concept sketch plan or "Version 1.0."

The basic concept of the Mirror L plan is to identify underutilized railroad land and parking lots for possible Green Line reuse, while taking no structures from within the Inner Belt Industrial Park.

The Mirror-L plan is composed of the following features, with very preliminary cost estimates :

1. Reduce by about half the footprint of the parking lot of the Boston Engine Terminal and add a second level of structured parking to serve both the BET and Green Line maintenance operations (150 spaces x $20,000/space = $3 million).

2. Acquire four track widths of the Grand Junction/Valley tracks -- $1 million

3. Relocate the Grand Junction Track to the east, passing through the BET parking lot; remove associated blacktop from old BET parking lot. ($1 million)

I-176-001

A detailed response to the "Mirror-L" storage and maintenance facility concept is included in the Appendices to the FEIR. An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

Use of about half of the BET parking lot would require mitigation in the form of a second-level deck for parking, with space for about 150 cars on each level. The total of 300 cars should be sufficient for the needs of the BET and of the Green Line facility.

The storage or layover tracks would be located east of Inner Belt Road and would contain 6,000 feet of Green Line trackage capable of storing 80 train units. The arrangement shown in my plan is representative of the area involved, with the understanding that the yard could be reshaped, with a different arrangement of switches. As shown, the yard contains a two track connection to the Green Line mainline tracks, with the tracks splitting to enclose the storage yard in between. As an option, the two tracks could be kept to the easterly side of the yard.

Access to the yard from the Green Line mainline would be via a turnout from the outback mainline track. Inbound trains would utilize turnouts into a center service track, so that safe reversals of train direction could be made. The intent of this service track is to avoid any reverse directional movements of trains on mainline revenue tracks.

My plan shows this center service track extending much of the way to the Lechmere Station, but on reflection I think the length of this track could be reduced to only the segment west of the Fitchburg tracks. As the DEIR notes, trains coming from Union Square under any of the options, would travel to the Lechmere Station and reverse direction there.

I have shown the floor elevation of the maintenance building and layover yard as elevation 9, but this elevation could be raised if there is a specific need to do so. The design can also include a slip ramp track from the yard directly towards Union Square to avoid any reversing movements. As in all alternatives, the highest number of individual train reversals is two : coming from inbound trains to the yard from Union Square and Brickbottom. Two of the three movements from the yard could be made with no reversals at all. The Mirror L option makes these directional reversal movements safely and without operational interferences with mainline tracks.

The highest elevations are the bridge crossings over the Fitchburg tracks, at track elevation 34. On either side of the main bridge, the grades would be 2 percent, with the Brickbottom area to the west having a flat elevation of about 22 feet. I have shown these track areas with spot elevation figures adjacent to individual tracks, to provide a three-dimensional sense to the plan. Two stub tracks can store severely disabled trains, simply to get them off the mainline and out of the maintenance yard area during peak periods.

I-176-002

A detailed response to the "Mirror-L" storage and maintenance facility concept is included in the Appendices to the FEIR. An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

In summary, Option Mirror L avoids the $50 million landtaking within the industrial park, while requiring minor takings from underutilized private parking lots. The design shows remaining unused land that could contribute to partial mitigation for these takings. As in Option L, this plan would require acquisition of four siding tracks from private railroads, and half of the BET parking lot, with compensation being the creation of a deck structure offering equivalent parking.

Within the industrial park, the only taking would be from underutilized parking lots. No structures would be taken. The acquisition of railroad track land that is not highly utilized can be viewed as income to the railroads. The parking garage and landtakings costs would appear to be approximately $5 million, so that the net capital cost saving relative to Option L would be $45 million. The maintenance yard would add 100 jobs to the area, with no loss of jobs and no loss of tax base.

I-176-002

The essence of my comment to MEPA for the DEIR is that there appears to be a credible new alternative for the location of the Maintenance Building and storage yard. Additional design and review work will need to be done to verify any claimed advantages and unresolved disadvantages. I am hopeful that MEPA will encourage MassDOT to investigate the Mirror-L alternative closely and to report their findings in the Final EIR.

With regard to the lost track connection between the Lowell line corridor and the CSX Grand Junction track to the north, I have noted that the proposed mitigation in the DEIR for the loss of this service is to re-activate the dormant track 10 passing at grade through the industrial park. There is hope in Somerville that other alternatives might be considered to the track 10 option, but since this issue seems to apply to all alternatives, the matter should be a parallel investigation by MassDOT, with investigations of different ways to perform the track 10 function, as applied to Yard 8 and Options Mirror H, L and Mirror L. By my own observations, it could be that Mirror H does not require reactivating track 10.

To some extent, I apologize for the engineering details and any aspects of the attached plan that may not be very clear. I would anticipate an effort to redraw Mirror L on a larger plan with fewer background conflicts, so that track details can be shown more clearly. I would note that we have still not fully transported ourselves into the electronic era, since the plans included in the DEIR CD-ROM provide a "window" to look at specific locations, but the scale of the printout is simply too small for anything less than constant use of a magnifying glass.

Thank you again for this opportunity to provide extended comment. I will be submitting copies of both my comments and the plan drawing to MassDOT and various interested parties in Somerville -- the plans all hand-colored of course.

Sincerely,



Stephen H. Kaiser, PhD

cc. Ellin Reisner
Alan Moore
Win Zamore
Stephen Mackey
Barbara Broussard
Mark Jaquith and Heather Hoffman

ADDENDUM TO MEPA COMMENT

DESIGN SPECIFICATIONS UTILIZED IN PLAN A-1.1

Maximum mainline grades on Green Line	6 %
Maximum grades on entrance tracks into yard	2 %
Maximum grades on layover tracks	0 %
Track-to-track elevation difference, grade separation	26 feet
Green Line minimum track spacing	10 feet
Commuter rail/freight minimum track spacing...	13 feet
Minimum Green Line horizontal curve radius.....	50 feet
Minimum freight rail horizontal curve radius.....	400 feet
Layover track length, total active space	6,000 feet
Layover track area provided	60,000 sq. ft.
Support building active space	52,000 sq. ft
footprint	60,000 sq. ft.
Central service track for directional reversal	mandatory
New parking spaces needed	105 spaces
Takings of private property	Minimal
Track 10 Alternatives	Not shown

Johnson, Holly (EEA)

From: Stephanie A. V. G. Kamath [stephanie.kamath@umb.edu]
Sent: Friday, January 08, 2010 9:31 PM
To: Johnson, Holly S (ENV)
Subject: Re: Response to Green Line Extension DEIR

Ravi and Stephanie Kamath
169 Monsignor O'Brien Hwy
Apt 403
Cambridge, MA 02141

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114
c/o Holly.S.Johnson@state.ma.us

Dear Secretary Bowles:

We are owners of a condominium in the Glass Factory building at 169 Monsignor O'Brien Hwy. We live and work in the area, and therefore we are very concerned about the Green Line Extension Project and the DEIR currently under review by your office. We are regular users of the MBTA, and the idea of extending service is an exciting one. But the current proposal presented in the DEIR, although it reflects considerable effort, is not ready for approval. There are significant problems with what is proposed, particularly with regard to the new Lechmere station site and tracks. We outline our concerns in more detail below.

I-177-001

We recognize the efficiency of using the historic right of way located immediately behind our building, and building a station nearby. But it is important to note that the Glass Factory itself is a listed building on the historic register and is here to stay. If the changes to the site make the condominiums in the Glass Factory undesirable or untenable for domestic living, the problem of an unstable or even derelict historic building separating East Cambridge from the Lechmere station and NorthPoint is terrible news not only for current owners like ourselves but for the whole Cambridge community. The current plans threaten to make it very undesirable to live in the Glass Factory. Although the DEIR acknowledges a "severe" impact on our building in multiple instances, it does not propose adequate mitigating solutions. Please insist on changes to the design and placement of the new Lechmere station and to area traffic patterns before approval in order to minimize impact on residents of our building.

I-177-002

I-177-003

There are several concerning factors involved in the traffic pattern plan, or lack thereof, reflected in the DEIR. The DEIR places the anticipated ridership at the new Lechmere station at more than 10,000, nearly double the existing Lechmere station ridership, and according to the plan it outlines, almost every rider who accesses the station or an MBTA parking lot by car will drive through a loop around our building, including Water Street, which runs directly adjacent to our building. The use of Water Street as a major thoroughfare and the addition of North First Street will add complexity to the already dangerous traffic patterns in this region of O'Brien Hwy, most notably in the region adjacent to the current Lechmere station. In addition, the plan calls for these same streets to service four busy bus routes, taxis, and corporate shuttles. These same streets bear the traffic of

I-177-004

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I-177-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-177-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-177-003

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-177-004

The Lechmere Station circulation plan has been revised for the FEIR. Water Street would be the primary access for vehicles entering from the north and for bus circulation. Water Street and O'Brien Highway are being redesigned to accommodate the appropriate traffic as permitted under the North Point project.

I-177-004

all who dwell in or visit our building, those who use the sizeable hotel on Water Street, and an increasing number of NorthPoint residents, and, moreover, it will be expected to serve residents, visitors, and commercial traffic to the new 22 Water Street development. Anyone who looks at Water Street, more of an alley than a street, would be bewildered by this idea. Indeed, as council records reflect, at one of the meetings concerning the 22 Water Street development, the architects of that project admitted that the road cannot be made to not meet city code to carry the traffic for that planned development alone, necessitating a separate service road away from the area for that project to be approved. Therefore, it is absurd to suggest that Water Street would be an acceptable primary access route for the new Lechmere station.

Currently, the DEIR only calls for slapping a traffic signal onto Water Street and adding a narrow access road connecting the new North First Street and Water Street, just behind our building. This proposal is clearly insufficient, even if the plan in the DEIR did not include the move to open the area to the major thru traffic from busy First Street. Please do not approve the DEIR until it includes a true service road that reroutes the bus lines and other heavy traffic invited by the new Lechmere site away from Water Street! Already, as the DEIR attests, the majority of current pedestrian crossings near our building (crossing McGrath or Cambridge St) provide a poor level of service (D, E, or F), and Cambridge has the highest level of bike traffic found at any point in the proposed area. Please insist on changes that will make the new site a true improvement rather than a dangerous recipe for traffic gridlock and accidents causing harm to vehicles, bicyclists, and pedestrians. Routing bus traffic away from directly under the windows of the Glass Factory will also diminish the traffic noise, vibrations, and fumes that would make life in the building untenable.

I-177-005

I-177-006

I-177-007

I-177-008

Current plans for the design and placement of the new Lechmere T-station are also insufficient. The DEIR claims the location was finalized through the earlier process when the station was to be built by a private developer – yet the plan for the station and the elevated tracks now presented is radically different from that proposed in the earlier process. Re-evaluation is absolutely necessary in this situation. The DEIR shows the tracks running very close to the rear of our building and acknowledges as indisputable that the impact of noise and vibration will be severe, 9 to 18 decibels higher, and also acknowledges that the mitigation methods listed in the appendix (particularly noise barrier walls) will not serve our location. The only basis that can be found in the report for claims that it will remain possible to live in our building are vague future condition statements like "analysis is needed" and the situation "will be assessed" (Noise and Vibration technical report p. 44, 45). Since this very necessary work has not yet been done, there is no basis for the report to claim that the project will not destroy our living conditions, making concentration and sleep impossible and prohibiting residents facing the trains from ever opening a window for fresh air. Imagine how you would feel if you lived here. Please do not approve the proposal until analysis has effectively shown the measures and true costs necessary for our building to remain habitable and has incorporated those into a more thoughtful design.

I-177-009

Ideally, we want to see the tracks moved further from the building than is indicated on current plans (less than 20 feet in certain instances!), preserving and extending existing green space. We also hope to see the station move closer to East Street, where it could be part of the entrance way to the eventual NorthPoint development, and for the station design to improve significantly. In particular, sidewalks where passengers for buses wait should move farther from our building to preserve our privacy and minimize impact from noise, light, and smoking. The substantial amount of surface parking shown in the plan is another serious concern. One half of our building will overlook the new parking, and we request that it be carefully designed with this in mind. Ample green space should be included in the design, and all lighting should be down lighting that minimizes light pollution to our building.

I-177-010

We also want to voice opposition to the proposed Mirror H location of the maintenance facility. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in NorthPoint. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed,

I-177-005

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-177-006

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

I-177-007

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-177-008

As reported in FEIR Section 5.4, the existing outdoor-to-indoor noise reduction of the Glass Factory Condominiums has been measured and the resulting interior noise level projections have been assessed against appropriate interior noise criteria. As discussed in DEIR/EA Chapter 6

I-177-010

Option L seems to be the best choice, but it seems more logical to place the maintenance facility at the end of the newly extended line.

Sincerely,

Ravi Kamath
Stephanie Kamath

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and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 5, Leachmere Station, described the proposed station, roadway and busway. It also describes proposed mitigation measures, including a noise barrier on the elevated structure near Glass Factory.

I-177-009

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-177-010

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

IAN BOWLES
THE EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
MEPA OFFICE
ATTN: HOLLY JOHNSON, MEPA ANALYST.
EEA # 13886
100 CAMBRIDGE ST. SUITE 900
BOSTON, MA 02114



DEAR SECRETARY BOWLES,

I HAVE BEEN A WORKING ARTIST/DESIGNER IN THE BOSTON AREA SINCE 1985. I MOVED TO THE BRICKBOTTOM COMMUNITY IN 1997 FROM FORT POINT IN S. BOSTON WHEN MY STUDIO WAS BULLDOZED FOR A PARKING LOT. I FEEL LUCKY TO HAVE A PLACE IN SOMERVILLE WHERE MY PARTNER & I CONTINUE TO PRODUCE WORK & LIVE.

I-178-001 I AM STRONGLY IN FAVOR OF THE GREEN LINE EXTENSION AND AM LOOKING FORWARD TO TAKING ADVANTAGE OF THIS AS MY MAIN FORM OF TRANSPORTATION, SECOND ONLY TO BIKE AS MY WAY TO GET AROUND.

I-178-002 I'D LIKE TO BRING TO YOUR ATTENTION THAT AS A SMALL DESIGN BUSINESS (ONE WOMAN!) I LIVE & WORK AT MY STUDIO. THE EFFECTS FROM NOISE, FUMES AND IMPACT OF YARD 8 WILL BE ON MY BACK 24/7.

FURTHERMORE THIS WILL CREATE A BARRIER TO FUTURE ECONOMIC DEVELOPMENT IN MY AREA. I'D LIKE TO LOOK FORWARD TO EXTENDING MY SERVICES TO THE LOCAL AREA, I'M A VERY STRONG BELIEVER IN DOING BUSINESS IN MY LOCAL COMMUNITY!! YARD 8 WILL LIMIT OPPORTUNITIES HERE.

PLEASE CONSIDER THIS LETTER FROM A CONCERNED BRICKBOTTOM RESIDENT WHO TRULY LOVES HER COMMUNITY & THE CITY OF SOMERVILLE

BEST. GINA KAMENTSKY B353.

I-178-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-178-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Tami Kaplan [tkaplan@MIT.EDU]
Sent: Friday, January 08, 2010 11:14 AM
To: Johnson, Holly S (ENV)
Subject: Comment on EEA #13886

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I-179-001 I am writing to comment on the DEIR for the Green Line Extension, EEA #13886. I used to live in South Medford on Hancock St., and I am delighted to see that the Green Line will be extended to serve my old neighborhood. However, the DEIR is wrong when it states that the College Avenue station will serve Medford Hillside. The College Avenue station will serve South Medford, but it will not serve Medford Hillside.

I-179-002 The College Avenue station is also a terrible location for a terminus. Route 16 makes sense as a terminus, because there is room at Route 16 for a terminus, there is easier road access, and there are possibilities for transit-oriented development. Continuing the Green Line to Route 16 would allow South Medford residents (and Somerville residents) to use the Green Line to go grocery shopping by taking the Green Line to Route 16. I am a strong believer in the value of public transit, and in fact I do not own a car.

I-179-003 The full-build alternative in the DEIR, extending the Green Line to Route 16, will have a far greater environmental benefit to Medford residents. The Secretary's Certificate required that the benefits be maximized, so I hope MEPA will reject this DEIR's choice to leave construction of the Route 16 portion to an uncertain later time. MEPA should insist that the final environmental impact report extend the Green Line to Route 16 as a single project.

Thank you,

Tami Kaplan
600 Memorial Dr.
Cambridge, MA 02139

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I-179-001

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-179-002

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-179-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

From: 01/07/2010 21:28 #007 P.007

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-180-001 | As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-180-001

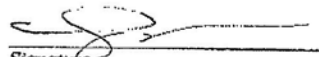
Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,



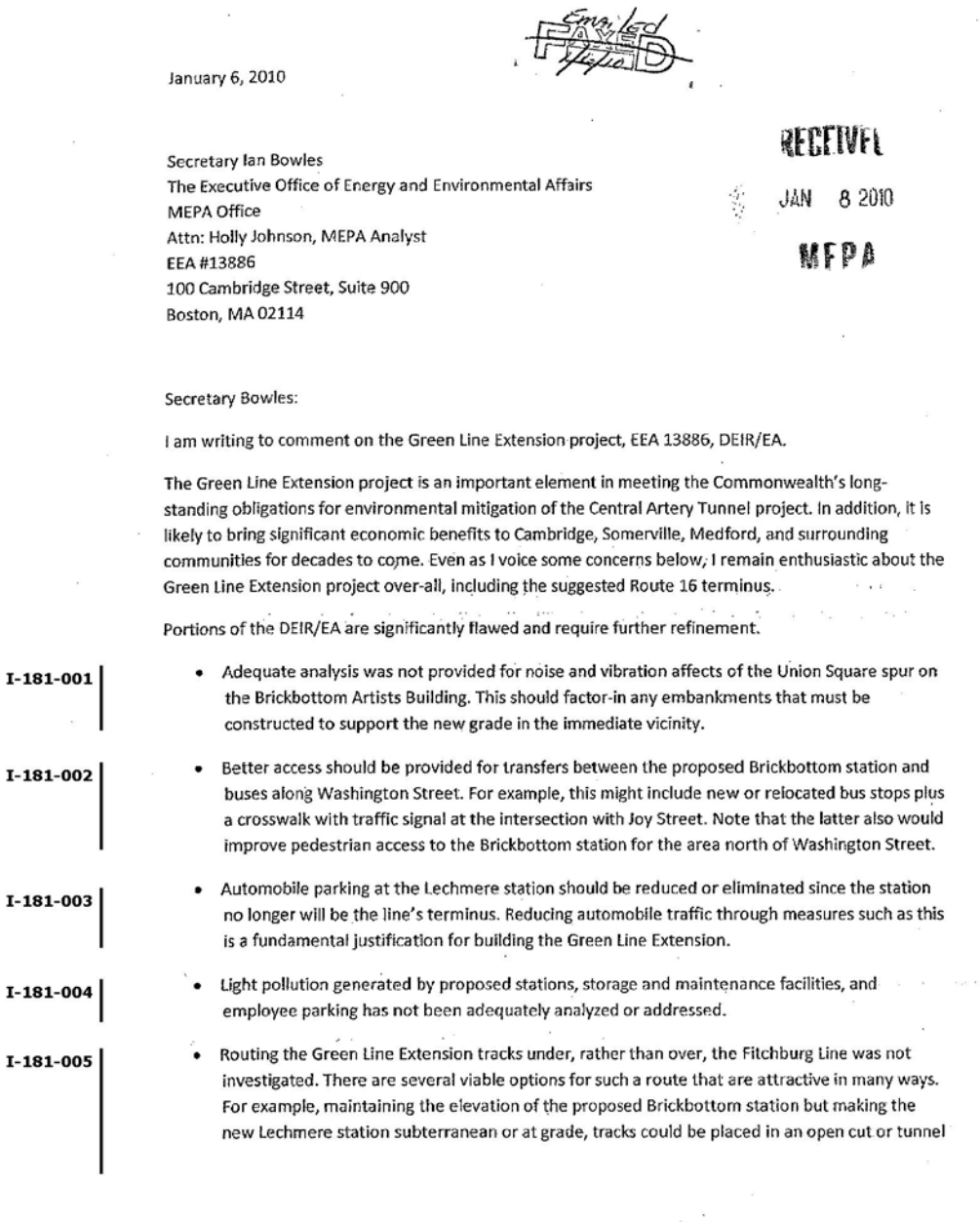
Signature

Grace Kang

Print Name

169 Monsignor obrien Hwy #510, Cambridge, MA 02141

Address



January 6, 2010

RECEIVED
JAN 8 2010
MEPA

Secretary Ian Bowles
The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Secretary Bowles:

I am writing to comment on the Green Line Extension project, EEA 13886, DEIR/EA.

The Green Line Extension project is an important element in meeting the Commonwealth's long-standing obligations for environmental mitigation of the Central Artery Tunnel project. In addition, it is likely to bring significant economic benefits to Cambridge, Somerville, Medford, and surrounding communities for decades to come. Even as I voice some concerns below, I remain enthusiastic about the Green Line Extension project over-all, including the suggested Route 16 terminus.

Portions of the DEIR/EA are significantly flawed and require further refinement.

I-181-001
- Adequate analysis was not provided for noise and vibration affects of the Union Square spur on the Brickbottom Artists Building. This should factor-in any embankments that must be constructed to support the new grade in the immediate vicinity.

I-181-002
- Better access should be provided for transfers between the proposed Brickbottom station and buses along Washington Street. For example, this might include new or relocated bus stops plus a crosswalk with traffic signal at the intersection with Joy Street. Note that the latter also would improve pedestrian access to the Brickbottom station for the area north of Washington Street.

I-181-003
- Automobile parking at the Lechmere station should be reduced or eliminated since the station no longer will be the line's terminus. Reducing automobile traffic through measures such as this is a fundamental justification for building the Green Line Extension.

I-181-004
- Light pollution generated by proposed stations, storage and maintenance facilities, and employee parking has not been adequately analyzed or addressed.

I-181-005
- Routing the Green Line Extension tracks under, rather than over, the Fitchburg Line was not investigated. There are several viable options for such a route that are attractive in many ways. For example, maintaining the elevation of the proposed Brickbottom station but making the new Lechmere station subterranean or at grade, tracks could be placed in an open cut or tunnel

I-181-001

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-181-002

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-181-003

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-181-005

I-181-006

through much of the route. Construction costs need not be excessive, there could be savings through reduced mitigation outlays, there would be greater flexibility in track alignment, and there would be reduced barriers to improving connectivity between the Innerbelt and Brickbottom areas. Furthermore, building the Green Line Extension tracks under the Fitchburg Line opens the possibility of adding a new station between Lechmere and Brickbottom, a station that would fill a notable gap and link the Innerbelt, Brickbottom, and NorthPoint communities. Such a routing is worthy of proper analysis.

I-181-007

- The proposed Community Path extension has not been given adequate treatment, particularly in the area between the Brickbottom and Lechmere stations. Easy connections between the Community Path extension and nearby Green Line stations should be provided, further discouraging automobile use to reach the Green Line Extension. A satisfactory right-of-way has not been allowed for, with the current proposal calling for a convoluted route with significant grade changes that would be difficult for bicyclists and pedestrians to negotiate effectively. A direct route adjacent and to the west of the Green Line Extension tracks, as had been envisioned in various earlier planning documents, must be allowed for.

The proposed maintenance facility, and analysis of alternatives, is particularly disconcerting for a variety of reasons.

I-181-008

- While storage and light maintenance facilities are needed along the Green Line extension route to provide for efficient operations, it is not clear that the proposed heavy maintenance facility is similarly required for efficient operations or more cost-effective than expanding the existing facilities at Riverside. In fact, the need for any new or expanded heavy maintenance facility has not been adequately demonstrated.

I-181-009

- Analysis fails to consider a potential commercial building adjacent to Yard 8, planned and through zoning variance approvals, on the recommended maintenance facility site as a "Proposed and Reasonably Foreseeable Project."

I-181-010

- As noted above, the "Yard 8" location of the maintenance facility results in an adjacent right-of-way bottleneck that does not allow for a direct and accommodating route for the proposed Community Path extension, another Proposed and Reasonably Foreseeable Project. Note that the "Mirror Scheme H" and "Option L" alternatives may allow for a Community Path extension route more similar to the envisioned route but this has not been explored.

I-181-011

- Insufficient analysis has been made of an overbuild option for "Mirror Scheme H." An appropriate design, perhaps integrating a parking structure with office and retail space, is likely to be commercially feasible, compatible with NorthPoint and Urban Ring visioning, and economically attractive even if "Mirror Scheme H" without an overbuild lacks these qualities. In addition, such an overbuild could provide substantial mitigation of sound from both the proposed Green Line and existing Commuter Rail maintenance facilities for the NorthPoint area.

I-181-004

The DEIR/EA and FEIR include conceptual Project designs. Designs for each station, the storage and maintenance facility, and the entire project alignment will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-181-005

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

I-181-006

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-181-007

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the

I-181-012

- Similarly, insufficient analysis has been made of an overbuild for "Option L," particularly with respect to reducing the cost of site acquisition. Further, employee parking in this option should be combined with Boston Engine Terminal parking, using a parking structure if necessary, to reduce the footprint required.

I-181-013

- The late inclusion of "Option L" suggests that there may be other viable locations for a storage yard and/or maintenance facility that have not received adequate treatment. Among these are the site on Somerville Avenue in Somerville now occupied by Target and AJ Wright (with overbuild potential to maintain commercial use of the property); the Somerville DPW site, which was rejected as too small, but including the adjacent Trum Field (with overbuild potential to provide a green roof and maintain recreational use of the field); and Tufts Alumni Field in Medford (again with overbuild potential to maintain sporting facilities). All of these options meet the required planning criteria yet have not received attention.

I-181-014

- Possible configuration changes to the Boston Engine Terminal and associated storage tracks were not factored into proposals for Green Line maintenance and storage facilities, even though this offers significant potential for improved plans with reduced mitigation requirements.

The Green Line Extension project will be transformative for the region. It deserves our very best effort if the communities it serves, and the Commonwealth as a whole, are to reap maximum benefit from the significant investment at hand.

Thank you for your consideration.

Sincerely,



Rob Kassel

1 Fitchburg St. Apt. C-420
Somerville, MA 02143

rob@alum.mit.edu
+1-617-388-3937

Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-181-008

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-181-009

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-181-010

Please see response to Comment I-181-009.

I-181-011

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-181-012

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-181-013

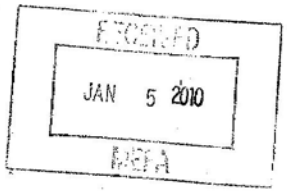
An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real

estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-181-014

The Boston Engine Terminal (BET) and major modifications to its operations are beyond the scope of the Green Line Extension Project. MassDOT will continue to coordinate with the MBTA to explore possibilities for shared facilities between the Green Line Extension storage and maintenance facility and the BET.



Elissa Katler
1 Fitchburg St.,
B255
Somerville, MA
02143
01/03/2010

The Executive Office of Energy & Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing in regards to the Project Number EEA #13886.

I have been a resident of the Brickbottom Artists Building since April of 1988. I have seen many changes and improvements in the direct area where we reside since that day. I have also seen some changes which have impacted negatively on my quality of life., such as the selling of an abutting building and destroying of many trees outside our windows. However, the train issue and specifically the maintenance facility and storage yard will provide the worst impact to the community. This community does not only serve itself, but it has overtime reached out to the larger Somerville area and has involved the larger community in projects and in providing such benefits as programs, 10 shows a year, and multiple special events., and the building has helped with scholarships, ETC. It has been a resource and asset for the larger community in many ways.

I-182-001

There have been issues such as diesel fuel and breakage of seals in windows facing trains, but we have tried to deal with these on our own. However, the placing of a maintenance Facility and Storage yard in what is called Yard 8 would really harm the community. The additional noise, negative sound and vibration impact and the light and air quality issues that would arise from this placement would be a big hindrance for the community , and would impact the lives of the 220 residents.

In addition to these concerns, the location at Yard 8 would be a hindrance to future development in the area and impact future tax revenue as property values in the area decrease.

I-182-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

As a resident of this area for over 20 years, I appreciate any consideration of alternatives to Yard 8.

Thank You,

Elissa Katler

Johnson, Holly (EEA)

From: Satish Katpally [satish.katpally@gmail.com]
Sent: Friday, January 08, 2010 11:42 AM
To: Johnson, Holly S (ENV)
Subject: Greenline Extension to Rt16 Comments.

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-183-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.
The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.
There are many, many problems with the Phase II approach, including:
    - Risk. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.

1

I-183-001

Please see Comment Letter I-002.

- Terminus Impact. Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- Cost. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- Project Management. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- Environmental Justice: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- Legal Mandate: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Satish Katpally
132 Rawson Rd
Arlington, MA 02155

Johnson, Holly (EEA)

From: Kehoe, Barbara (EEA)
Sent: Tuesday, November 17, 2009 10:49 AM
To: Johnson, Holly (EEA)
Subject: FW: MBTA green line relocation

From: Crowley, James (EEA) **On Behalf Of** internet, env (ENV)
Sent: Tuesday, November 17, 2009 9:56 AM
To: Kehoe, Barbara (EEA)
Subject: FW: MBTA green line relocation

Comments for the MEPA file

Jim Crowley
External Relations Coordinator
Executive Office of Energy and Environmental Affairs

From: Donna M. Keefe [mailto:sondela@comcast.net]
Sent: Monday, November 16, 2009 11:21 PM
To: Internet, Env (ENV)
Subject: MBTA green line relocation

16 November 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Attn: Holly Johnson, MEPA Analyst

Dear Secretary Bowles,

I am a resident of East Cambridge. We are very concerned about the relocation, as well as the new design of the Lechmere MBTA Station. I am sure your office has conducted a thorough investigation and is well informed on the number of people who travel on the Green Line to go to the CambridgeSide Galleria, as well as the numerous residents of East Cambridge and the surrounding Cambridge community that use the T. We are all very concerned about the relocation across McGrath Highway.

I-184-001

A major concern is safety. Considering the people who will be crossing McGrath Highway to catch the train or bus, which will include mothers with baby strollers, the elderly, teenagers who often disregard crossing lights, and just simply the masses that we witness everyday heading to the mall ignoring traffic lights, one could only imagine the dangerous situation this may cause for both cars and pedestrians. I hope that with a move to the other side of McGrath, all crossings at Cambridge Street and McGrath Highway will be well designed with protection and ease for crossing. The current pedestrian crossing down that street at the Museum of Science to NorthPoint Park is extremely dangerous having a long wait for the walk light and short timing to cross. The crossing to the proposed Lechmere Station is almost twice that distance. Neither drivers nor pedestrians are very patient.

I-184-002

Another issue is the design of the new MBTA Lechmere Station that was presented to the community. It is hard to conceive that a brand new station would be built without an interior space and sheltered area to purchase tickets and to wait for the train. It appears that all the other new and/or renovated stations have been designed for the elements of New England weather. A better design with an inside entrance will enhance the experience of using mass transportation encouraging more ridership.

1

I-184-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-184-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

The design and planning itself is very poor and flawed. I question why the location to the entrance is at the back of the station. There really needs to be more than one entrance and easy access for the handicap passengers. The bus station needs to be developed keeping the future of NorthPoint in mind. Good planning will be able to serve the residents, office workers, and others who will work or live there.

I-184-003

Most importantly, the historic Lechmere Station needs to be preserved. The East Cambridge community has created a plan for reuse of the structures as a year round public market. This is a brilliant idea. A market square that will function as a connector of East Cambridge to the new Lechmere Station will provide a much needed retail and open market. It will also bring new businesses to the area to serve the new residents and employees creating a lively marketplace that will enrich the neighborhood. Destination Lechmere will become just that - a place to go using the convenience of the T.

I sincerely hope you will consider the needs of the community and your riders in the design and relocation of Lechmere Station. It is very important to also look at reuse and maintaining some of the history and fabric of the community while making improvements.

Thank you,
Donna M. Keefe

Donna M. Keefe
sondela
263 Hurley Street #2
Cambridge, MA 02141 USA
617-576-0680
sondela@comcast.net www.sondela.net

In the realm of ideas, everything depends on enthusiasm; in the real world, all rests on perseverance.
- Johann Wolfgang Van Goethe

I-184-003

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

#3

Priscilla Lamb Kennedy
1 Fitchburg St, C115
Somerville, MA 02143
January 3, 2010

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles:

I am writing in regards to the DEIR on The Green Line Extension Project going thru Somerville, Massachusetts. The project Number is EEA#13886.

First of all, I want you to know how delighted I am that the Green Line is finally coming to Somerville. I can assure you, I will be one of the first to ride it.

I-185-001

However, **I am opposed to Yard 8 which has the Maintenance Facility, Storage Yard, and tracks located very close to my front door.** This would mean excessive noise, vibration, noxious fumes, decreased light and other unknown problems that I and 220 other residents of the Brickbottom Artist's Community would have to deal with 24-7, forever.
I request that the project not go to a final EIR with yard 8 included.

I-185-002

I would like you to conduct a thorough review of other locations for the Maintenance Facility and Storage Yard such as Option L and Mirror H, a combination of the two or other locations. The plan could consider using more MBTA land from the Boston Engine Terminal site.

Option L should be studied and elaborated upon. As Option L is now drawn, the curved tracks coming toward the Brickbottom Community would create a shrill noise each time a car traveled over it which would be many times a day. Could Option L be shifted onto the Boston Engine Terminal Property to allow the tracks to have less of a curve?

I-185-003

According to your overview "The Commonwealth is committed to initiating passenger service on the Green Line Extension by December 31, 2014." **You do not need to have the Maintenance Facility and Storage Yard done by December 31, 2014.** I urge you to take more time to consider the needs of Somerville and the Brickbottom Community and draw up a plan for this extensive Maintenance Facility and Storage Yard, that shows consideration for our needs but also serves the whole MBTA system. This Facility is designed to serve the whole MBTA system not just Somerville and the Green Line Extension therefore it should be designed with that in mind.

I-185-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-185-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-185-003

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental

I-185-004 The Green Line tracks planned adjacent to Brickbottom should be moved further away from the Community. The plan to have extensive train reversals during each day should be reevaluated and eliminated to prevent excessive noise near our community.

I-185-005 I am requesting that a Citizen Advisory Committee be established to oversee the rest of the project to ensure the community has a voice in the Green Line Extension Process. I want to impress upon you that this is our home. We do not want our homes excessively and negatively impacted by this Project. We enjoy socializing and dining in our small Courtyard which is within our complex of buildings. With Yard 8 a short distance from our Courtyard we would no longer be able to be outside. Yard 8 would completely destroy our way of life at our home.

Thank you and I look forward to seeing more agreeable alternatives to Yard 8.

Sincerely,

Priscilla L Kennedy

Priscilla Lamb Kennedy

impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-185-004

The precise alignment for the tracks near the Brickbottom Artists Building will be determined during preliminary engineering and final design. The tracks will be located as far from the building as possible. The minimum clearance will probably be about 15 feet. Operations of the Boston Engine Terminal (BET), MBTA Commuter Rail and other railroads, and railroad vehicles are beyond the scope of the Green Line Extension Project. The BET "Drill Track," or the track used to access the BET from the west, will be relocated approximately five feet further from the Brickbottom Artists Building as part of the Green Line Extension Project.

I-185-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Jeremy Kessler [commute@peculiarity.net]
Sent: Thursday, December 31, 2009 9:19 AM
To: Johnson, Holly S (ENV)
Subject: Regarding EEA #13886 Green Line extension DEIR

Secretary Ian Bowles/Holly Johnson
MEPA Analyist

Dear Secretary Ian Bowles,,

I-186-001

The community members engaged with CCP would like to see all decisions related to the planning of the Green Line and the land use in the ¼ mile areas around the 7 proposed stations to reflect this list of Corridor Core Principles. Please see third paragraph for list of Core Principles and corresponding suggested changes to Draft Environmental Impact Report (DEIR).

The Community Corridor Planning project, a grassroots effort to engage community members in the land use planning along the Green Line extension, has brought together hundreds of people to frame a list of core principles to guide their recommendations for land use along the extension in upcoming months. We ask that these principles be taken into consideration as the Mass. Department of Transportation finalizes its Environmental Impact Report.

Core Community Principles for
Neighborhood Development Along the Green Line Corridor

? More Local Jobs: We want a fixed percentage of respectable jobs of all types with good wages and benefits for Somerville residents, from construction to permanent.

? Increase Commercial and Economic Development: We want to see the creation of squares as destinations, with careful attention to mixed use of commercial/residential, reuse of buildings, and economic development to increase the tax base.
o Draft Environmental Impact Report (DEIR) does not address Department of Transportation (DOT) commitment to economic development
o New MA DOT is supposed to work with Secretary of Economic Affairs to promote station location and design that promotes economic development and the community needs to show MA DOT how to do this ? to change the paradigm pro-actively.

? Improve the Green Environment: We want a safe, environmentally friendly neighborhood with more green space, trees, and gardens; reduction of noise; avoidance of light pollution; and prevention of toxic chemicals in the air.
o Response to DEIR: Given this principle, it is important that more attention be given to:
o Noise of operations
o Mitigation during construction for noise, vibration, etc.
o How close the tracks will be to the Brickbottom Building and other buildings along the right of way
o The need to involve neighborhoods affected regarding noise and vibration
o Recommendation that testing be done immediately after project begins to determine if estimates for vibration and noise done for the DEIR are accurate.
o Possibly transfer at Ball Square but only if Commuter rail is electric not diesel because of the pollution it would create for neighbors
o Rep. Provost noted in comments made that diesel trains should not stop in Somerville. This should only be permitted if trains are electrified

I-186-001

MassDOT has reviewed and considered the “Core Community Principles” for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

o Consider dual-mode conversion of existing commuter trains
? Encourage Walking and Biking: We want to encourage walking and cycling, through safe, bike/pedestrian friendly design of streets and paths around and between stations.
o Pedestrian accessibility is poor for the station designs in the DEIR
o The design required in the MEPA Scope (EENF) does not sufficiently address the detailed concerns and requirements for each station.
o In the DEIR design and engineering is insufficient for moving the project to a final EIR because of a range of unaddressed issues (i.e., station design, siting, bike parking, community path integration)
o Bike access and bike parking at all stations needs to be improved.
o New Light Rail Vehicles (LRVs) should be designed to accommodate bicycles (like Portland LRVs)
o The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

? Create Community Gathering Spaces: We want both indoor and outdoor safe, public gathering spaces for community members.

? Improve Access: We want above standard, safe access to and between stations for people with disabilities, strollers, and pedestrians in general

? Community Involvement: We want to make sure residents are included on an ongoing basis in the planning, design, and zoning changes to the stations and areas around them. Youth, artists, and others should help design stations, with attention to amenities. We need an easy and clear process for residents to address problems as they come up, with ways of immediately resolving unseen impacts.
o Ongoing Community participation in the next phase (presumed to be done as a design/build project) is necessary
o Public involvement will help to keep decision-making public (transparency)
o Need to have a field office that residents can go to with concerns on an ongoing basis
o Need neighborhood based community groups to be involved in planning around each station,
? Connecting Buses and Trains: We want to ensure inter-modal access between neighborhoods and stations, for new train service to be adequate and speedy, and for existing bus lines to continue to serve areas not connected by train.
o Need opportunity for future connection with other lines, such as Red Line at Porter Square.
o Several stations do not show bus stops, or nearest bus stop is located outside of station. Would be helpful to design station and alter bus route to allow for stops at the stations.

? Keep and Add Local Businesses: We want locally owned, culturally diverse, clean businesses in commercial areas with employees who live in Somerville.

? Keep Somerville Affordable: We want to make sure people of all economic means have the ability to afford housing and living costs, so that Somerville residents, such as child care workers, cab drivers, local business employees and others can stay here affordably.

? Maintain Our Diversity: Preserve and encourage economic and ethnic diversity of residents and businesses.

I-186-002

The state needs to plan all transportation projects on the basis of guiding principles for Transit Oriented Develoment (TOD), smart growth and quality of live impacts. For example, TOD and land use are the planning and organizing focus of the South Coast Rail project, but

I-186-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-186-002

have been ignored in the Green Line extension planning despite the requirement by the Secretary to address these concerns in the EENF.

Jeremy Kessler
96 Oxford St
Somerville, MA 02143

From: 01/07/2010 21:28 #007 P.005

Umair Khan
169 Monsignor O'Brien Highway #209
Cambridge, MA 02141

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-187-001 I am a resident of the Glass Factory Condominiums and have the following comments about the Green Line Extension DEIR.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

I-187-001

Please see Comment Letter I-013.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

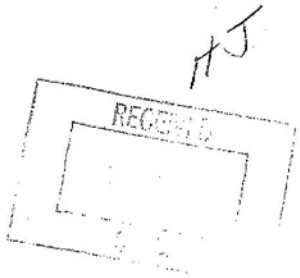
MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

I hope you will take the concerns of Glass Factory residents seriously.

Sincerely,

Umair Khan



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing in regards to the Green Line Maintenance Facility and Storage Yards sites. We seem to have come down – or up -- to 3 choices for siting the maintenance yard buildings and tracks. I am thrilled to see that EOT (and others) have shown some flexibility in this process. At first I was not very happy with the way this was proceeding, seemingly without regard for the cities and with minimal opportunity for comment. I sent my emails, but I got the feeling they weren't having any effect. Maybe I was wrong. Glad to see.

Though I ride the green line about twice per year, I am strongly in favor of extending the line. I went to the nearby hearings and meetings even before the maintenance facility controversy started. I'm also thrilled about the "community path," which I expect to use quite a lot. I look forward to seeing some more detailed plans. Given the scale of the GLMF as an obstacle to the Community Path, are there plans being made to create access from the west side of the Green Line, such as from the Brickbottom neighborhood (which is currently isolated by tracks and a highway)??

I-188-001

So back when Yard 8 was initially presented, I thought nothing of it. It would be foolish to expect that undeveloped land/space in an urban area would never have a building on it. I was indifferent or even in support. I silently wondered if my neighbors were making a big fuss over nothing. However, since then a lot of people with more knowledge of transportation infrastructure and urban planning have convinced me that it's a bad idea to put the GLMF at Yard 8. I do understand that it is the easiest and cheapest option, but those considerations should not be overriding. Mayor Curtatone has also been very convincing in his arguments against Yard 8.

Would Yard 8 ever have worked? (rhetorical question) Perhaps if the building were situated further north away from Brickbottom and not so tall, and if some solution were found to the access issue of Innerbelt, but I only saw one set of drawings. I don't know the history of Innerbelt. It's sad that the area is named after the unfinished project that was supposed to destroy it. Anyway, Somerville (nevermind us noisy artists) should have much say in where in the city the GLMF gets built. I am sure the city would trade Yard 8

I-188-002

for some other parcel not owned by the MBTA(?) or whoever. Putting new windows on Brickbottom is not acceptable to me or anyone else. We do not want to live in a climate controlled building. We want to open the windows and breathe fresh – or somewhat fresh – air. Our building is not equipped with ductwork and all that anyway. You'd have to tear

I-188-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-188-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-188-002

it down and start over. If you're prepared to do that, then we can talk about it, but it won't be a popular notion. It seems to me that Yard 8 was poorly designed and very sloppily and aggressively presented. I doubt that it would have been acceptable to Somerville in any form. I am please to see alternatives.

I like Option L a lot and Mirror H okay. I have heard some noise from Cambridge about Mirror H, and I understand that North Point is valuable, but so far I see a huge expanse of wild grass and weeds over there. This reduces my sympathies. North Point is no more valuable than Innerbelt! It has the advantage of plans on paper, but nothing more. That being said, I have nothing against North Point. I actually share many of the concerns of the Glass Factory residents. [By the way, they need to move their main entrance off the McGrath Highway. Vehicles stopping on the highway are a terrible nuisance and hazard. Please see if you can design them some access on the other side of their building, which should have been done when it was developed.] Option L will mean the end of a few big box businesses, and I hope that they can be compensated adequately.

My suggestions in a nutshell:

I-188-003
- Stick the GLMF over by the existing MBTA blue thing and isolate it as much as possible from residential areas.

I-188-004
- Consider making the GLMF and train yard not so ugly as usual. Then you can save money on visual barriers. Some people like trains.

I-188-005
- Keep the Community path on track – or accelerate it.

I-188-006
- Organize – or let someone organize – a tour of the Newton/Watertown GLMF so people can get some idea what it would be like – or not like.

I-188-007
- Minimize parking at the GLMF. I realize that employees have to be there early, but there are other ways to get around.

I-188-008
- Put some solar panels on the roof and maybe over the yard. It would make the whole thing way more popular around here.

Thank you for your consideration,

Ulandt Kim
Brickbottom resident since 1997.

I-188-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-188-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-188-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-188-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-188-007

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. Opportunities to reduce or consolidate parking requirements for

employees will be taken into consideration during preliminary engineering of the maintenance facility.

I-188-008

Detailed design of the maintenance facility, including the potential for solar panels, will be conducted during the preliminary engineering phase.

Johnson, Holly (EEA)

From: Fine,Fine,music... [lifewaschangedbyrockandroll@yahoo.com]
Sent: Friday, January 08, 2010 11:40 AM
To: Johnson, Holly S (ENV)
Subject: somerville bike path and green line extention support

Dear Ms Johnson,

I-189-001

I am a rider and commuter who uses the Somerville community bike path and I am writing to urge you to please support the extension of the bike path in Somerville.
I am not completely up to speed on the technicalities but I believe our best hope of including this far sighted and Green friendly transportation and rec. option is to bundle the request for the path together with]the proposal for the green line extension, which has more powerful backing behind it

I believe it is the right thing to do for the state and the community

The similar linear path above the red line which was similarly funded has been a great success and indeed is a huge asset to the region connecting as it does to the most used bike path in the country, the minuteman bike path/

Thank you again for taking the time to consider our comments and best of luck in obtaining approval for this important project !

Stephen and Gail King
70 south Lincoln
Lincoln Ma 01773

1

I-189-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

BILL KIPP
1 FITCHBURG ST, C104A SOMERVILLE, MA 02143 TEL-617-666-2344



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, EPPA Analyst
EEA # 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I-190-001 This letter is in response to **EEA #13886.** I want to register my objection to the MBTA's Yard 8 project and suggest that **Option L** be a less objectionable alternative. I look forward to the extended Green Line into Somerville, but I have some concerns.

First, the Brickbottom Artists' Condominium is a very active community with 220 residents in a live/work three building complex. Twenty two years ago as a young family along with eighty-five other members we converted an A&P warehouse complex into this creative community. Many more families followed and now there is a great mix of young and old. Adding Yard 8 would mean more noise, trains and pollution all detrimental to our community's health and livelihoods.

I-190-002 Second, on a photo assignment this summer on the top floor of One Federal Street in Boston, I had the time to look out over the buildings into Somerville. I was really stunned, shocked to see that the only large green space to the N.West was adjacent to the Brickbottom Complex and Inner Belt Road. It would be a shame, some would say a sin, if this green area were to be covered in train sheds and tracks.

I-190-003 Thirdly, I am concerned for the future of my photo business at One Fitchburg Street. If there is going to be constant ground vibration from the Yard 8 site it will make me rethink the type of work that I will be able perform there. I can presently live with a few trains a day rumbling by at the far end of the building, but constant vibration, even at low sonic levels, would be detrimental to the most lucrative part of my present business model.

Thank you for your time and consideration of my concerns.

Bill Kipp

I-190-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-190-002

Please see response to Comment I-190-001.

I-190-003

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am an abutter to the proposed Green Line Extension terminus location at College Ave. in Medford. We bought our house three years ago in Medford knowing the Green Line was coming, and I look forward to the project's eventual completion.

However, while I support this project in concept, the progress thus far has left me questioning whether the Green Line Extension (GLE) will ever actually serve the Medford Hillside. I disagree with MassDOT's claim that a terminus station at College Avenue fulfills the state's legal commitment to serve Medford Hillside, as the vast majority of what is commonly accepted as the Hillside area is far beyond where the service would terminate by December 2014. Further, the Medford Hillside neighborhood would bear the additional burden of increased traffic destined for a terminus station at College Avenue, resulting in a net negative effect for one of the specific environmental justice neighborhoods to be served by the SIP requirement.

I-191-001

I-191-002

MassDOT must construct the Preferred, Full-Build Alternative for the Green Line extension to Medford with a terminus station at Route 16 in one phase by Dec. 31, 2014, in order to achieve the maximum environmental benefits of the project and to fulfill the requirement to serve the Hillside. For these reasons, The Draft Environmental Impact Report should not be accepted as the Final Environmental Impact Report, because the DEIR fails to fulfill the requirements of the Dec. 1, 2006 MEPA Certificate that determined the scope of the project.

I-191-003

MassDOT defines the Medford Hillside only one time in the entire DEIR, and they define it as such:

I-191-004

"The Cecil Group, Inc., planning consultants, prepared the Medford Community Development Plan (2004) for the City of Medford, Office of Community Development as part of the Commonwealth of Massachusetts' Executive Order 418. Although the Development Plan focuses primarily on Medford Square, the document identifies Medford Hillside (broadly defined as Boston Avenue from the Mystic Valley Parkway to Warner Street) as an economic development area. If the station site is approved, the City of Medford has expressed an interest in exploring the implementation of TOD adjacent to the station."

I-191-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-191-002

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT

I-191-004

This definition is so broad, it is laughable, and more importantly it never actually appears in the Medford Community Development Plan (2004). The plan is available for download here: https://app2.ocd.state.ma.us/e418portal/Plans.asp?c=M

The plan linked above, as part of Executive Order 418, is largely a plan targeted for Medford Square. It contains no definition of the Medford Hillside that would agree with what MassDOT has claimed. In fact, in relation to "economic development areas" there is a map on page 22 that identifies economic development areas with red boxes. In the key at the right, Box E-1 is identified as Medford Hillside. On the map, Box E-1 is centered on Winthrop Street and Boston Ave., a block or two in each direction. There are a number of supporting maps in separate PDFs filed with the 2004 MCDP that define Hillside as between Winthrop and North St. with an apparent skew towards the North St. side.

We simply cannot and should not allow MassDOT to use a misleading definition of Medford Hillside just because it makes the project easier or cheaper for them to implement.

Consider:
-- If MassDOT is allowed to redefine Medford Hillside in this way, the Burget Brookings, and Charnwood Ave. neighborhoods will all be impacted with the additional burden of a College Ave. terminus and temporary train storage in the morning beginning at 4:00 AM. With a Route 16 terminus, residential neighborhoods would be spared from train staging in the morning, and the terminus would be situated much further from residential buildings.

-- Some parts of this neighborhood will receive no mitigation because MassDOT is not required to mitigate for the Commuter Rail track shift in the area in which full Green Line tracks are not laid, which will inevitably lead to a quality of life decrease for some residents.

-- Unfortunately, most residents do not know they will not receive mitigation since a College Ave. terminus was never shown at the heavily attended public workshops, but instead was slipped in during the last few months before the DEIR was released.

-- A terminus station at College Ave. would have a dramatically different operation and impact on the neighborhood than a mid-route station, and these impacts were not evaluated in the DEIR. MassDOT has not supplied a plan to the public showing College Ave. as a permanent terminus. This is a completely undesirable option, but it must be considered as a possible scenario.

-- The traffic impacts of a College Avenue terminus station also are understated and under-evaluated and require much further study.

will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-191-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-191-004

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-191-004

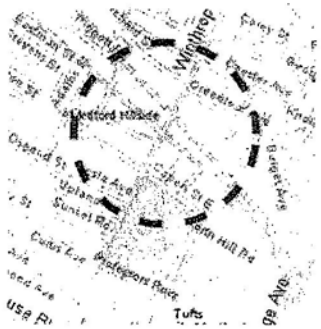
-- Constructing the Medford branch of the extension in two phases would result in unnecessary and undue disruption and other impacts to the College Avenue neighborhood.

-- If MassDOT is allowed to terminate the line at College Ave., easy access to the station from the neighborhoods closest would be dependent on path access through Tufts property to College Ave. (reached at the end of Burget Ave. and Sunset Ave.), without that access, which may be tenuous given the unlikelihood Tufts would want its Facilities parking lot to become a thoroughfare, there may not be a single non-Tufts Medford residents within a 5-10 minute walk of the only station in "Medford Hillside". This simply cannot be the intention of the project.

Many of these effects would at least be a burden worth bearing if the area would be fully served by the new service, but instead Medford just ends up bearing the load of the project so that MassDOT can claim success on some contrived definition of the Medford Hillside. When I look at maps from the Beyond Lechmere project, it's not clear to me that MassDOT, just a few years ago, would buy their own claim, that College Ave. serves the Medford Hillside, as these two areas were defined distinctly and separately in those maps with separate areas they intended to serve as specified by the locus' in the maps from Beyond Lechmere shown below:



Beyond Lechmere B-6



Beyond Lechmere B-7

While I think the failure to meet the SIP requirement to serve the Medford Hillside is the most critical element missing from this project thus far, it is not my only concern.

Operationally, I understand that the Maintenance facility for the proposed Green Line is of great importance to the project, but can't help but feel that the facility has become, to many, the focus the project, MEPA needs to bring this project back in line with its true purpose by shifting the focus to maximizing the environmental benefits

I-191-005

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

of this project. The DEIR clearly demonstrates that the benefits from the project in regard to ridership when going to Rt. 16 (70% switching from auto travel), including reduction of vehicle miles traveled in the service region; air quality improvements; and service to environmental justice communities, are all best served by extending the Green Line to Rt. 16, and MEPA must not allow this to be put off into a nebulous second phase, which may or may not ever occur. By doing so, it fails to meet both the letter and spirit of the SIP requirement to serve the Medford Hillside. As former Secretary Aloisi said in his report on his tenure, "The Green Line extension is a lost opportunity without the clear and unequivocal commitment of extending the line to Route 16. "

I-191-005

In contrast to all of the concerns I have with this project, I am encouraged by MassDOTs commitment to design these stations in a manner that fits well with the surrounding neighborhoods, and does not include parking. Most importantly they have taken great care to minimize residential property takings. However, the current design of the Rt. 16 station (and the only one publically released) flies in the face of all other designs in this project. MassDOT officials have publicly acknowledged (at a Medford City Council Meeting on 11/17/2009) putting forth the "worst case scenario" for the Rt. 16 station. This is not acceptable in a document that is required to reduce all negative impacts. MEPA should require further analysis of Rt. 16 so that the public is not reviewing a best case or a worst case but a viable design of what MassDOT can actually achieve at this location. The Medford Greenline Neighborhood Alliance (MGNA) has put forth an alternative design for the Route 16 station, which demonstrates that adjusting the track curvature and platform orientation would eliminate the need to acquire the commercial properties at 200 and 222 Boston Avenue. This would reduce the project cost by at least $15.4 million (the buildings' current assessed values) and preserving nearly $200,000 in annual property tax revenue for the city of Medford. Analysis of MGNA's plan should be included as part of the further analysis of this site in a final EIR.

When you look at the $130 million dollars needed to absorb the Lechmere Relocation into the State's plan, one can't help but think that Lechmere and the Maintenance facility have taken an enormous amount of both time and budget to plan so far, some of it unexpectedly, and that we wouldn't be arguing over the inclusion of Rt. 16 had this not occurred. We cannot allow these pieces of underlying infrastructure distract and drive the project--these are requirements to support the project, but not the project itself. MEPA is well situated to assert this by requiring full service to the Medford Hillside and inclusion of Rt. 16 in a final EIR. As former Secretary Aloisi said, "The Green Line project must also be approached with the clear acknowledgement that prior assumptions regarding the source of funding the Lechmere Station relocation no longer are valid, and may not be for a long time."

We need to make the most of this incredibly unique opportunity, which will certainly not happen again in our lifetime. MassDOT has repeatedly referred to this project in public workshops as a 100-year opportunity, and we should all be proactive in ensuring that it is completed in a manner that best serves the affected

communities, and in one phase. The environmental and economical benefits of this project over years and decades will be enormous, and MEPA with its long view of the future benefits of this project to the environment and the Commonwealth is one of the few we'd hope to recognize and fight for this.

Sincerely,

Michael Korcynski
149 Burget Ave.
Medford, MA 02155
mkorcy@gmail.com

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-192-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-192-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Chantal Kesmidis & G P Kesmidis
Signature

Chantal Kesmidis & Gregory Kesmidis
Print Name

169 Msgr O'Brien Hwy #714 Cambridge MA
Address

Johnson, Holly (EEA)

From: Kosta, Sandra [Sandra.Kosta@childrens.harvard.edu]
Sent: Friday, January 08, 2010 1:14 PM
To: Holly.S.Johnson@state.ma.us
Subject: Greenline Extension to Route 16

Dear Ms. Johnson:

I-193-001 | I-193-002 | I-193-003 | I-193-004

Up to this point I have kept quiet on the subject of the Green line extension but after reading today that this is the last chance to comment I must do it now. I am a home owner who lives on Piggott Road, and as a resident of the City of Medford who will be directly impacted by the proposed extension I am adamantly opposed to the Greenline extension to Route 16. I currently endure the noise from the Commuter Rail and cannot imagine living there with the additional and more constant noise of Greenline trolleys. I have serious concerns about increase of noise (during and after construction), increased activity in the area and increased number of people and cars in the area. More importantly, I am vehemently opposed to any plan that includes the demolition of any homes. I am dismayed and angry that such a project is even being considered if homes are to be sacrificed. The need for a T-stop is not at a level to warrant the taking of homes. In fact, I question the wisdom of adding one more stop to the extension when currently there exist a multitude of buses from the area to various subway stations in addition to direct access to the commuter rail in West Medford. Having the Greenline extension end at College Ave would allow still further access without negatively impacting home owners along the rail line to Route 16. Furthermore, if indeed it is true that a parking facility is planned as part of the Extension to Route 16 plan this means a major increase in traffic to an area that has recently seen an overwhelming increase in traffic along Boston Avenue due to more and more students bringing cars to school. If no parking structure is planned then only those within walking distance can access the trains but of course what will happen is people will be driven and dropped off there causing traffic increases that negatively impact the environment.

I see no real advantage to the extension to Route 16. A stop at College Ave would be within walking distance of Route 16 or a very short bus ride for people from the West Medford and certainly the Hillside area. The stop there as far as I know will not impact homes.

Having reviewed the names on the original petitions that were signed in favor of the project, I am bothered that so many of those people do not live in the Hillside/West Medford area.

I-193-005

I fear that there is a rush to advance this project before those of us who will be most impacted are able to respond adequately and to be heard sufficiently. Unfortunately, I have been disappointed to hear very little support or consideration from some of those who have been elected to represent the interest of all their constituents. What happened to the commitment to formulate a plan that did not include the taking and demolition of homes in Medford?

As a resident who lives alongside the tracks between College Ave and Route 16, I hope that my opinion would rank as high if not higher than those who live well beyond this area. It is easy to be in favor of something when it is not going to have any negative impact upon you.

I-193-006

How will the City of Medford compensate me for the impact the proposed extension to Route 16 will have upon my life and my property?

Sandra Kosta

1

I-193-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-193-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-193-003

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts. It is intended that no residential buildings will be demolished or acquired for this Project.

I-193-004

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and

Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-193-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-193-006

Please see response to Comment I-193-001.

Kenneth J. Krause
50 Mystic Street Medford, MA 02155
781-396-0920 kenneth.krause@comcast.net

January 7, 2010

RECEIVED
JAN 7 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

Thank you for this opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project. As a Medford representative on the Green Line Extension Project Advisory Group, I have been actively involved in the project during the DEIR phase, and I was similarly engaged as a member of the Beyond Lechmere Northwest Corridor Study advisory group.

I am pleased to see the project advance to this important milestone, and find much to be complimentary of in the DEIR analysis and recommendations, including:

- Designation of the Mystic Valley Parkway (Route 16) terminus station, with no parking, as the Preferred Alternative, as this option is shown to have the greatest benefits under all evaluation criteria
- Minimization of neighborhood impacts by avoiding residential property takings or displacement of residents (neither anticipated in Medford)
- Recommendation of significant mitigation measures that will improve existing noise and vibration conditions, even with the addition of Green Line service.

However, the purpose of your review is to determine whether the DEIR fulfills the requirements set forth by your predecessor, former Environmental Affairs Secretary Robert Golledge, in the Dec. 1, 2006 MEPA Certificate on the Green Line Extension Expanded Environmental Notification Form, which determined the scope of the DEIR.

I-194-001

After through examination, it is my opinion that the DEIR *does not* fulfill these requirements, and therefore *should not* be accepted as the Final Environmental Impact Report (FEIR), as the project proponent MassDOT has requested.

I-194-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

According to the 2006 Certificate, in order to be accepted as an FEIR, the DEIR must provide a "reasonably complete and stand-alone description and analysis of the project, project alternatives and environmental impacts, and adequately address mitigation." Further, the Certificate states that the DEIR should "investigate all feasible methods of avoiding, reducing or minimizing impacts to land."

The DEIR fails to meet these requirements in numerous ways, most significantly by:

I-194-002
- Failing to analyze and design the Mystic Valley Parkway (Route 16) station to minimize impacts and maximize the benefits. In fact, the DEIR presents what MassDOT describes as a "worst-case scenario" for the station – the only element of the project treated in such a fashion.

I-194-003
- Failing to fully analyze the impacts of a College Avenue station as the terminus on the main branch to Medford, which is the proposal for Phase I of the project and for an undetermined period thereafter.

I-194-004
- Failing to fully assess environmental impacts and address mitigation measures, particularly in the Medford Hillside area, which will *not* be served by the Green Line extension if it terminates at College Avenue, and actually will bear additional burdens that would not be inflicted if the terminus station were at Route 16.

I-194-005
- Failing to fully assess the environmental impacts and address mitigation measures, nor even begin a design, of "Option L" for the Green Line storage and maintenance facility, a late addition to the DEIR but one with broad support from abutters and the affected communities, and much more preferable than the previously recommended Yard 8 site.

Despite being filed 10.5 months after the Dec. 1, 2008 deadline, I find the DEIR to be materially deficient in almost every category.

Therefore, the Secretary of Environmental Affairs should require MassDOT to continue the Environmental Impact analysis to address the many outstanding issues cited here and presented at the Nov. 18, 2009 public hearing, most importantly the complete analysis of the Mystic Valley Parkway (Route 16) station.

I-194-006
Further, MassDOT should be required to conceive a new funding strategy that will allow it to construct its Preferred, Full-Build Alternative – that is, a terminus station at Route 16 with no parking – in one phase by Dec. 31, 2014, in order to achieve the maximum environmental benefits of the project *without delay* and fulfill the commonwealth's legal deadline for providing Green Line service to Medford Hillside.

Following are specific issues related to the DEIR.

I-194-002

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-194-003

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-194-004

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-194-005

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further

Incomplete Analysis of Mystic Valley Parkway Station
The DEIR fails to fully analyze and reduce/mitigate the environmental impacts of the Mystic Valley Parkway terminus station, and scant work was performed on the station design over the last 20 months of the project. The DEIR states:

> "In February of 2008, a series of public workshops were conducted in the neighborhoods to discuss the proposed station areas and to obtain feedback from stakeholders on the various concepts developed. Based on previous work and the feedback obtained at these workshops, the station concepts for Gilman Square and Mystic Valley Parkway/Route 16 were generally accepted by the public and local officials and did not require additional evaluation." (Appendix B, page 7).

While the concept of the Mystic Valley Parkway station might have been "generally accepted," numerous serious issues were raised at the Feb. 6, 2008, station workshop, including objections to proposed commercial property takings from a major property owner in attendance, as well as concerns about pedestrian/bicycle accommodations, traffic volume/safety, parking, and impacts on the Mystic River Reservation.

Later, in Appendix B, the DEIR acknowledges the need for additional study of the station:

> **4.6 Route 16 / Mystic Valley Parkway Station**
> This station would extend the Green Line's service further into Medford. The proposed station location is just south of the railroad bridge over Mystic Valley Parkway. This station has potentially high capital costs for right-of-way and station site acquisition and bridge reconstruction. Due to design constraints, community and City of Medford concerns, further evaluation would be needed to determine the feasibility of this station. (Appendix B, page 15)

However, while Appendix B contains a detailed analysis of all the other stations (except Gilman Square) with regard to Station Access, Transit Operations, Land Use Compatibility and Project Cost, no such analysis is provided for the Mystic Valley Parkway Station, even though the DEIR states that the Future Full-Build Alternative has been "fully evaluated" (page ES-7).

Instead, the DEIR presents a design for the Route 16 station that would require the acquisition of two large office buildings in Medford, which would add at least $20 million to the cost of the project and result in a decrease of almost $185,000 in annual property tax revenue to the city of Medford.

When called to appear before the Medford City Council on Nov. 17, 2009, to explain this design recommendation and associated negative property impacts, Project Manager Steve Woelfel of MassDOT stated numerous times that the design for the Route 16 station represents the "worst case scenario" with regard to property acquisition needs.

consideration and Option L is identified as the preferred maintenance facility site.

I-194-006

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

This is not acceptable in a document that is required to minimize all negative impacts. Further, Mr. Woelfel's comment contradicts the DEIR's assertion that "station locations and track curvatures have been optimized in order to avoid unnecessary property acquisitions" (page 5-9).

Clearly no attempt at such optimization has not been undertaken at the Mystic Valley Parkway Station, although at the same Medford City Council meeting, Mr. Woelfel announced that MassDOT had in fact created another Route 16 station design that *did not* require the acquisition of the two office buildings, but had yet to publicize it.

I-194-007

Also at the Nov. 17 Medford City Council meeting, the Medford Green Line Neighborhood Alliance (MGNA) presented an alternative design for the Route 16 station that adjusts the track curvature and platform orientation such that the need to acquire the commercial properties at 200 and 222 Boston Avenue is eliminated. Further benefits of such a design include:

- Reducing the project cost by at least $15.4 million (the buildings' current assessed values).
- Preserving about $185,000 in annual property tax revenue for the city of Medford
- Eliminating the need to relocate numerous small businesses and more than 200 employees, and the related expense

MEPA should require MassDOT to complete its analysis and present a station design at Mystic Valley Parkway that preserves the commercial properties at 200 and 222 Boston Avenue, and also analyzes the potential adaptive re-use of the U-Haul building at 600 Mystic Valley Parkway, Somerville, as part of the station design.

In addition, further analysis is required at the station regarding:

I-194-008

- Providing a pedestrian connection to the West Medford commuter rail station, which was required in the DEIR but not addressed.

I-194-009

- Re-evaluating potential ridership to include additional bus route access, which is not considered in the DEIR.

I-194-010

- Including Alternative 2 (Mystic Valley Parkway terminus) in Air Quality Analysis Comparison for Project Packages Benefits; Table 5.6-10 only includes Alternative 1 (College Avenue terminus). The Mystic Valley Parkway terminus will result in greater CO_2 reductions (page 5-94) and should be included in the analysis.

All of this analysis should be required as part of an additional EIR submission to MEPA.

Full-Build Alternative Should be Built in One Phase

Citing an anticipated inability to obtain funds to construct the Full-Build Alternative as part of a single project, the DEIR recommends that the Medford branch of the extension be completed only to College Avenue by Dec. 31, 2014 (the commonwealth's legal requirement for providing Green Line service to Medford Hillside), with the section between College Avenue and Route 16 to be built by an unspecified date.

I-194-007

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-194-008

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-194-009

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout, access, and ridership potential at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Relegating the Full-Build Alternative to an undetermined second phase contradicts the DEIR's conclusion that this alternative provides the maximum benefits from the project in regard to ridership, reduction of vehicle miles traveled, air quality improvements, and service to environmental justice communities.

At the Dec. 1, 2008 meeting of the Project Advisory Group, Tom Wholley of VHB said his company's analysis showed the greatest air quality benefits would be derived from the alternative that places the terminus station at Route 16. Further, Mr. Wholley stated that the Green Line extension would improve air quality on a local and regional basis by reducing levels of carbon monoxide, particulate matter, ozone, and greenhouse gases. He said it was "extremely rare" for a transportation project to show positive impact in all four of these areas.

Delaying the construction of the Full-Build Alternative also fails to respond to the acute need for better transit service in the immediate area that was quantified in the DEIR. According to the DEIR traffic analysis, the intersection of Route 16 and Boston Avenue had the second highest daily traffic volume (28,915 vehicles) in the entire project area (page 4-43). In addition to the accompanying mobility impairments and air quality degradation, this overwhelming traffic volume also negatively impacts the adjacent Mystic River, as storm run-off from Mystic Valley Parkway drains directly into the river, carrying harmful elements from auto emissions.

I-194-011

The Mystic Valley Parkway Station should be built as part of a single phase, otherwise the environmental benefits will be delayed or possibly never realized, as the construction of Phase 2 is not a certainty.

A one-phase project build to Route 16 also is preferable because:

- By providing the greatest benefits with regard to air quality, mobility, ridership and environmental justice, the Preferred Alternative is the strongest regional project and would be most competitive in vying for federal funding.
- By MassDOT's own estimate, the cost of constructing the final leg of the extension, from College Avenue to Mystic Valley Parkway, would increase by $50 million by undertaking it in a second phase between 2016-2020.
- Delaying the completion of the project into a second phase would push it outside the scope of the current MEPA and NEPA review process, requiring another complete review, additional costs and further delays. All can be avoided with a single-phase construction.

Other comments on the Route 16 terminus

- There are almost 10,000 people living with a half-mile (10-minute) walk of the Route 16 station. In addition, two multi-use paths (walk/bike) are being planned to lead directly to the station. The first, from the Alewife/Arlington side, just was approved for stimulus funds. The other, which will follow the Mystic River toward Wellington, will be the next to be built. These safe walking/biking options will encourage people

I-194-010

Please see response to Comment I-194-008.

I-194-011

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

to not drive to Davis Square, Alewife or Wellington Station to take the T, but rather walk to the Green Line.

- A terminus station at Route 16 would be accompanied by numerous roadway improvements that would improve traffic flow and safety, including the addition of a turning lanes, signalization changes, and a complete reconstruction of the dangerous (especially for pedestrians) rotary at Mystic Valley Parkway and Alewife Brook Parkway. None of these improvements will be undertaken if the extension terminates at College Avenue.

- In the DEIR analysis, the Route 16 station was one of four stations with "High" potential for Transit Oriented Development. Economic Development is a key component of the Green Line extension project, as well as regional mobility and air quality improvements.

- The Route 16 station also would serve three significant Environmental Justice communities in West Medford and West Somerville that otherwise would not be served by a College Avenue terminus.

I-194-012

- All of the proposed station designs, and in particular the Route 16 station, do not call for adequate bicycle parking. The Route 16 station should have at least four times as many parking spaces as called for in the DEIR (50), particularly since this station will be fed by two new bicycle/pedestrian pathways from east and west.

I-194-013

- All of the proposed stations do not provide for adequate and inviting access for pedestrians and for people with disabilities. Much more design work needs to be done in this area.

College Avenue Terminus Station Environmental Impacts Not Evaluated

The DEIR did not fully evaluate the environmental impacts of a terminus station at College Avenue. A terminus station would have a dramatically different operation and impact on the neighborhood than would a mid-route station.

Rather than passing through the station, trains will travel several hundred feet beyond the station in order to reverse direction on tail tracks. This operation will occur every 5 or 10 minutes throughout the service period. In addition, Green Line cars will be staged at the terminus station in the early morning hours prior to the start of service. These impacts are not evaluated in the DEIR.

I-194-014

The traffic impacts of a College Avenue terminus station also are understated and underevaluated. The Alternative 1 Peak Hour Trip Summary by station shows an increase of only 5 pick-up/drop-off passengers (40) at a College Avenue terminus station versus the number of pick-up/drop-off passengers at College Avenue (35) in Alternative 2B (Mystic Valley Parkway terminus). The total daily drop-off/pickup riders at a College Avenue terminus are shown to be only 15 high (115 vs. 100) than with a Route 16 terminus.

I-194-012

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-194-013

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-194-014

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and

I-194-014

The actual number of pick-up/drop-off riders is likely to be much higher, the addition of which will have a greater negative impact on the traffic at College Avenue/Boston Avenue (9,000 daily vehicles) than it would have at Mystic Valley Parkway (29,000 daily vehicles).

I-194-015

Furthermore, several intersections in the College Avenue destination area – Boston Avenue/Winthrop Street, Boston Avenue/Harvard (Warren) Street, Main Street at George Street, Mystic Valley Parkway/Winthop Street – already are operating at an "F" level of service and will only be made worse by additional vehicle traffic destined for a College Avenue terminus station. These additional traffic delays equate to more emissions and diminished air quality.

Also, according to the DEIR, the intersection of Boston Avenue and College Avenue's level of service is projected to decrease from "E" to "F" with a terminus station at College Avenue, but would remain at level "E" with a Route 16 terminus station.

Indeed, the negative impacts of a terminus station at College Avenue cannot be overstated. This five-pointed intersection is already hazardous for drivers, pedestrians and bicyclists. Accommodations for pick-up/drop-off activity are only shown on the northbound side of Boston Avenue, when in fact a heavy amount of pick-up/drop-off traffic is likely to arrive traveling southbound (from West Medford, West Somerville, East Arlington, etc.) and will likely attempt U-turns on Boston Avenue, or try to snake through residential streets to access other arterials. The confluence of Mystic Valley Parkway and Boston Avenue is much more suited for accommodating pick-up/drop-off traffic.

Finally, constructing the Medford Branch of the extension in two phases would result in unnecessary and undue disruption and other impacts to the College Avenue neighborhood that are neither analyzed nor proposed to be mitigated in the DEIR.

Additional Environmental Analysis/Mitigation Deficiencies

I-194-016

- The DEIR recommends numerous mitigation measures, but they are often described with caveats such as "to the extent practicable" and "where feasible." Before construction begins, the MassDOT should be required to enter into written agreements with each affected city, defining the mitigation obligations and deadlines for fulfillment.

I-194-017

- Additional mitigation measures should be specified including cash payments to affected abutters, such as were agreed upon for the Greenbush commuter rail extension project, and retrofitting the existing commuter rail diesel locomotives with emission-reduction devices, especially since the commuter rail tracks will be moved closer to certain abutting properties.

I-194-018

- The construction of noise barriers is not included in the proposed Construction Sequencing (page 3-55). Addition of the noise barriers should be added to the Construction Sequencing and as early in the process as possible, so their benefits are realized during the construction period as well as during the Green Line service operation. The same holds true for financial payments to abutters for improvements

access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-194-015

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-194-016

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-194-017

Please see response to Comment I-194-016.

I-194-018

Please see response to Comment I-194-016.

I-194-018

such as new windows and insulation, which should be distributed before construction begins so the property owners will receive the benefits of these mitigation measures during the project construction.

I-194-019

- MBTA policy is to commit at least 2% of project cost to noise mitigation. With an overall cost estimate of $1 billion, the Green Line noise mitigation commitment should be at least $20 million; the DEIR estimates only $15.8 million.

- Underscoring the incomplete nature of the analysis of the Route 16 station, the DEIR does not appear to include any vibration monitoring in the portion of the project north of College Avenue. This should be rectified in a additional EIR.

I-194-020

- The proponent should be required to perform soil analysis when the commuter rail tracks are relocated, testing for contamination from the railroad ties (creosote, etc.) and performing any necessary cleanup or mitigation.

College Avenue Station Does Not Fulfill the State's Legal Obligation To Provide Service to Medford Hillside by Dec. 31, 2014

I-194-021

The Secretary's Certificate requires that the DEIR describe its consistency with the State Implementation Plan. While MassDOT maintains that extending Green Line service to College Avenue fulfills its SIP legal requirement to serve the Medford Hillside area by Dec. 31, 2014, I strongly disagree, an opinion that I and many others have expressed to MassDOT during the course of the DEIR and prior.

There has always been a degree of ambiguity regarding what constitutes "Medford Hillside," as it is a neighborhood without officially prescribed boundaries. Perhaps further complicating matters, MassDOT chose the DEIR as an opportunity to redefine what it considers to be Medford Hillside while seeking no input on the matter from the Project Advisory Group.

In the 2005 Beyond Lechmere study, Medford Hillside was defined as extending "over the river to West Medford," and that "Boston Avenue is a primary roadway through Medford Hillside that has urban centers and activity centers at the intersection of Winthrop Street and along the section from College Avenue to Arlington Street" (Beyond Lechmere Northwest Corridor Study, page 3-44.).

The DEIR offers a new description of Medford Hillside, which it says is "broadly defined as Boston Avenue from the Mystic Valley Parkway to Warner Street" (page 4-18). The DEIR intimates that this definition came from the 2004 Medford Community Development Plan, although that plan offers no such description of Medford Hillside (see https://app2.ocd.state.ma.us/e418portal/Plans.asp?c=M and document EO418_CD_Plan under Medford).

More accurate are dozens of maps submitted to EOT in August 2008 by the Medford Green Line Neighborhood Alliance (MGNA) that all label "Medford Hillside" as the area northwest of Winthrop Street to Mystic Valley Parkway. These include EOT's own maps from the Beyond Lechmere study and other state publications such as MBTA bus maps.

I-194-019

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-194-020

An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

I-194-021

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

The area south of College Avenue is generally known as South Medford, with Warren Street (a k a Harvard Street east of Boston Avenue) being in the center of South Medford. (Ironically, Warren Street is actually closer to the proposed station at Ball Square than it is to College Avenue, further indication of the absurdity of its inclusion as part of Medford Hillside.)

A terminus station at College Avenue does not constitute service to Medford Hillside, much of which is more than one-half mile from the station. Project Manager Kate Fichter admitted as much at an Aug. 24, 2009 meeting with College Avenue neighbors when she described the College Avenue station as "ill-defined as Medford Hillside."

Yet, the DEIR states that "the extension will pass through the Medford Hillside neighborhood to South Medford" (page 4-25). This is erroneous as applied to Alternative 1 (College Avenue terminus). The only things that will "pass through" the Medford Hillside neighborhood under this scenario will be additional automobiles destined for the station, adding to already congested traffic and poor air quality.

I-194-022

Medford Hillside would only be truly served by the Green Line extension if there were a station at Winthrop Street (which EOT evaluated but did not recommend) or at Mystic Valley Parkway. Thus, the latter should not only be the Preferred Alternative but also the Proposed Project, to be built in one phase by Dec. 31, 2014, as required by the SIP.

Maintenance/Storage Facility Unresolved

Another major unresolved issue of contention during the DEIR process has been the location of the maintenance/storage facility required by the Green Line extension. Despite studying approximately 20 potential sites, MassDOT continued to favor the original recommended location of Yard 8, even though this location was universally opposed by the city of Somerville, residents of the neighboring Brickbottom complex, the Somerville Chamber of Commerce and citizen advocates. MassDOT attributed to the lengthy delay in its filing of the DEIR to its ongoing efforts to resolve this issue.

Finally, just before the DEIR was filed, MassDOT added a new potential site, called Option L, to the DEIR, along with Yard 8 and a site submitted by the city of Somerville known as Mirror Scheme H.

Option L has received considerable support from all factions of the Somerville community, and its proximity to the existing Boston Engine Terminal makes it a more practical location than Yard 8. While this site seems to offer great potential, it has not been studied to any degree of depth, nor has a design been offered. Also, as proposed, Option L would cost approximately $52 million more than the Yard 8 location, mostly due to property acquisition needs.

I-194-023

Nevertheless, the site has the potential to break the logjam of community opposition and ultimately be satisfactory to all concerned parties. So, MEPA should require full analysis of this location and adjacent options in an additional environmental filing. (One additional option, adjacent to and east of the Option L site, is being proposed by

I-194-022

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

I-194-023

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-194-023

Somerville resident Alan Moore and would eliminate the need for the expensive property acquisitions. Evaluation of this option should also be required.)

Lechmere Station Relocation Impacts

Midway through the DEIR process, MassDOT was forced to assume the redesign and cost of the relocation of Lechmere Station as part of the Green Line extension project, because a developer was unable to fulfill its commitment to pay for the station relocation into the stalled North Point project.

This has added approximately $111 million to the cost of the project, or roughly the estimated cost of the College Avenue-to-Route 16 section of the extension. More than anything, this circumstance has forced MassDOT to relegate this final portion of the Green Line extension to Medford into a second phase, to be built sometime between 2016 and 2020, even though the DEIR demonstrates that the Full Build Alternative to Route 16 provides the greatest air quality benefits, as described above.

I-194-024

MEPA should require MassDOT to seek alternative funding the for Lechmere Station relocation, as well as redesign major project elements such as the Route 16 station, to reduce costs in order for the entire project to be economically feasible to be built in one phase by Dec. 31, 2014.

Cost Estimates, Funding Details Missing

I-194-025

The DEIR was to include a Conceptual Construction and Operating and Maintenance cost estimate for the Preferred Alternative commensurate with 10% design including contingencies/allowances appropriate in this stage of project advancement. Construction costs were to include, at a minimum, the commuter rail and Green Line track, bridges, retaining walls, and other supporting infrastructure, the maintenance and storage facility, all stations and supporting facilities, and any portion of the Community Path included in the project. Operating costs were to include changes in Green Line, commuter rail, and bus operating costs.

While the DEIR provides an overall cost estimate, and occasional references to particular cost estimates such as for noise barriers and vibration mitigation, detailed cost estimates are not provided. Noticeably absent was any analysis of the Cost Per Hour of User Benefit for each alternative, a crucial measure of the project's competitiveness for federal funding.

Similarly, the DEIR was to include detailed information on funding sources, but it does not, only to say it is unable to identify sufficient funding to support the construction of the College Avenue-to-Route 16 section of the project.

An additional EIR should be required to provide a full, detailed cost project and a summary of funding sources and how these funds will be secured.

Other issues

I-194-026

- The project design in a further Environmental Impact Report should preserve the potential for future stations – between Lechmere and Washington Street/Union

I-194-024

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-194-025

Please see response to Comment I-194-024.

I-194-026

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-194-026

Square in Somerville, between College Avenue and Route 16 in Medford, along with an extension to Porter Square that could serve both Cambridge and Somerville.

I-194-027

- The DEIR lacks any meaningful analysis of how the Green Line extension will integrate with bus service and broad pedestrian and bicycle access. The fact that only 5 percent of riders are expected to travel to/from stations by car (pick-up/drop-off), and that 70 percent of new riders will be switching from the auto mode, speaks to the paramount importance of improving access to the station areas for people walking, bicycling, and arriving via bus.

I-194-028

- The MEPA certificate should require a public process framework for the remainder of the project that will ensure collaboration with the community and local governments to set project mitigation standards and remedies, to accomplish better station and area designs and minimize environmental impacts.

Conclusion

The new Massachusetts Department of Transportation is committed to make "investments and decisions that strengthen communities, support economic growth and improve public health." The Green Line extension is the perfect example of a project that will fulfill that mission, but only if it is built in the most environmentally beneficial and cost-effective manner. The Environmental Impact Report is perhaps the most crucial document for ensuring that this occurs, and by the SIP mandated deadline of Dec. 31, 2014.

I urge the Secretary to consider all the above comments as sound evidence of the need for MassDOT to conduct additional environmental analysis, and require such work.

However, it is also important that the overall project be able to continue without any unnecessary delays. Therefore, I urge the Secretary to use his discretion to frame the requirements in the forthcoming Certificate in such a way that the project can proceed on pace toward meeting its interim and final deadlines while the missing or incomplete environmental analysis is finished to MEPA's satisfaction.

MassDOT refers to the Green Line extension as a "100-year project:" we only get such an opportunity once a century. This also speaks to the importance of getting the project done right, for if we do not, the negative implications will be felt into the next millennium. I urge your careful consideration of these comments and trust you will require this project be "done right" for our communities, our environment, and future generations.

Thank you for your consideration.

Kenneth J. Krause

Kenneth J. Krause
50 Mystic Street
Medford, MA 02155

11 Kenneth J. Krause – DEIR #13886

I-194-027

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-194-028

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Elaine Krohn [elainekrohn@mac.com]
Sent: Thursday, January 07, 2010 10:12 PM
To: Johnson, Holly S (ENV)
Subject: Greenline Extension/Lechmere Station

Dear Ms. Johnson -

We own a condo at the Glass Factory.

I-195-001 We are concerned that the tracks are too close to the building. Would it be possible to move the tracks further from the building? The DEIR reports lists the Glass Factory as severely impacted. How can we expect to quietly enjoy our property with the anticipated noise and vibration issues?

I-195-002 Our unit is on the 3rd floor. We will be facing train cars/tracks all day? Can a barrier be set up so that the view is not severely impacted?

I-195-003 It has become apparent that units that face the proposed construction are impossible to sell. In addition to the noise and vibration, most owners will be severely impacted by the decrease in property values. Can we expect some type of financial compensation?

Thank you for your attention and I look forward to your response.

Elaine Krohn
The Glass Factory
169 Monsignor O'Brien Highway
Unit 310
Cambridge, MA

1

I-195-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA and the station layout were evaluated. It was determined that these changes could result in additional impacts on Lechmere area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-195-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

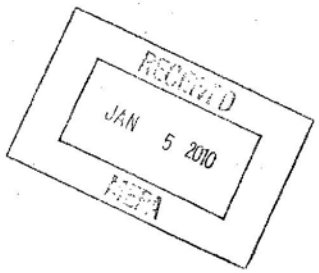
I-195-003

Please see response to Comment I-195-002.

HJ

January 3, 2009

Mr. Jayme Lacour
Brickbottom Artists Building
1 Fitchburg St.
Unit C-509
Somerville, MA 02143
jjlacour@gmail.com



Secretary Ian Bowles
Commonwealth of Massachusetts Executive Office of
Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge St., Suite 900
Boston, MA 02114

Re: Project Number EEA #13886

Dear Secretary Bowles:

Regarding to the above-referenced project, the Green Line Extension beyond Lechmere to Medford, I thank you for your ongoing engagement in and encouragement of public dialogue and comment throughout the course of this complex undertaking. I wish to comment on the Draft Environmental Impact Report (DEIR) filed for this project, particularly the siting of the Heavy Maintenance and Storage Facility as proposed in the DEIR for the Yard 8 site in the Brickbottom/Inner Belt district and the potential impacts this would have on the Brickbottom Artists Buildings as assessed by VHB/Vanasse Hangen Brustlin.

Let me state that I am a seven-year resident of the Brickbottom Artists Building, and have commuted, every day for seven years, to my job in Boston's Financial District via the Green Line from Lechmere. I have walked the half-mile to Lechmere through blizzards, rain, sweltering heat, and bitter cold. I have encountered groundhogs, coyotes, rats, the homeless, drug dealers, and speed-demons on my daily treks. I have stepped in or, luckily, skipped over broken glass, feces, roadkill, and fresh garbage. Few would welcome a nearby Green Line stop in our neighborhood more than me.

I-196-001
I-196-002

However, the fragile existence and tremendous potential of my neighborhood are greatly compromised by the proposed siting of the Heavy Maintenance and Storage Facility in our midst. The VHB/Vanasse Hangen Brustlin technical memorandum on "Potential Impacts to Brickbottom Artists Buildings," dated May 2009 and supplemental and informative to the DEIR, provides inadequate and misleading conclusions regarding the devastating consequences the siting of the Heavy Maintenance and Storage Facility would have on the vibrant mixed-used Brickbottom Artists community. Additionally, insufficient planning for mitigation of noise and vibration generated by the Green Line extension on the Brickbottom Artists Buildings threaten the continued existence of this community, and no economic study has been conducted to assess the impact this proposed siting would have on the Brickbottom/Inner Belt district, one of the

I-196-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-196-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. An expanded analysis of potential noise and vibration impacts at the Brickbottom Artists Buildings is included in FEIR Chapter 8. These projections take into account the collective impacts of rail uses in the area. During preliminary engineering, MassDOT will conduct further analysis for several individual properties, including the Brickbottom Artists Lofts. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-196-002

"last frontiers" for development in the central Boston metropolitan area and a prime candidate for thoughtful, world-class transit-oriented development.

I-196-003

The VHB/Vanasse Hangen Brustlin technical memorandum does not state the parameters or methodology of the research behind its assessment of potential impacts to the Brickbottom Artists Buildings. It proceeds to make assumptions and statements regarding existing conditions and potential impacts based on, presumably, in-office research. This begs the questions:

- What was the research methodology used in the assessment of the potential impact of the Green Line Maintenance Facility on the Brickbottom Artists Buildings as stated by the VHB/Vanasse Hangen Brustlin Technical Memorandum?
- Were any thorough site visits conducted by VHB in the research process for this document?
- Were aspects such as building height, building materials, and building complex adjacencies considered throughout the process?

The VHB-authored Technical Memorandum states:

"The Artist Buildings are approximately 95 feet from the support facility site and are separated from the site by an existing wall topped with a chain-link fence, vegetation next to the fence, and the existing MBTA right-of-way."

I-196-004

This is incorrect. There is no separation between the Brickbottom complex and the proposed support facility site, excepting a chain-link fence. The grade of the proposed site is at the finish floor grade of the second level of the Brickbottom Cannery building, at the eave level of the Brickbottom Foundry building, and 15 to 20 feet above the rear ground elevation of the Brickbottom Bakery building, the three components of the work/live complex. An earth-backed retaining wall/viaduct runs the length of the complex along this grade separation. The vegetation mentioned are weeds and invasive species such as ailanthus. This mis-statement falsely gives the impression that the Brickbottom complex is separated from the proposed Maintenance Facility site by a substantial barrier; I assure you, it is not. Again, this begs the questions,

- Were any thorough site visits conducted by VHB in the research process for this document?
- Was any first-hand, on-the-ground research and documentation, such as site photography, field notes, etc., utilized in the research process?
- To what capacity was anecdotal evidence or online image research used in the production of this document?

The document then discusses noise.

"The existing noise levels at the Artist Buildings are 57.6 dBA due to the existing rail operations in the MBTA right-of-way. Combined with the noise from the commuter rail, new Green Line mainline operations alone would increase noise

I-196-003

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-196-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

levels at the Artist Buildings to 75.3 dBA."

The noise I experience from the MBTA commuter rail and freight trains is episodic; it occurs at intervals throughout the day, lasts for a few minutes, and occurs less frequently at night. I chose to live here with full knowledge of the nature of the railroad activity surrounding my home. Likewise, noise levels on the Green Line Extension will also be episodic, and, as a supporter of the extension project, I am more than willing to accommodate this additional noise in my life.

I-196-005

According to VHB's research, noise generated by

"...the support facility alone would increase noise levels at the Artist Buildings to 69.9 dBA. These would also constitute a "severe" impact...."

Thus, the Maintenance Facility alone would constitute a constant, "severe" noise level, "severe" being defined by the document as noise levels over 63.5 dBA. Yes, the combined noise levels of the Green Line, the commuter rail, and the maintenance facility will be 75.3 dBA as VHB's research indicates, but this will be episodic noise, the type of noise I have come to expect in my home. But the maintenance facility will subject me to severe noise levels of 69.9 dBA 24-hours a day, seven days a week. The logic that the maintenance facility "would increase noise levels by only 1.1 dBA when combined with the operation of the Green Line Extension" is entirely faulty and a gross mis-statement of fact. The maintenance facility will increase noise levels at Brickbottom to a *constant, severe* level of 69.9 dBA. See the table below:

Source of noise	dBA	Categorization	Frequency
Existing conditions (Commuter rail and freight activity)	57.6	**Less than Moderate**	**Episodic**; Commuter rail and freight trains run periodically throughout the day, less frequently at night
Existing conditions plus Green Line Extension activity	75.3	**Severe**	**Episodic**; existing rail activity plus Green Line main line activity will run periodically throughout the day, less frequently at night
Existing conditions plus proposed Green Line Maintenance Facility	69.9	**Severe**	**Constant**; the proposed maintenance facility would operate 24 hours a day, 7 days a week, 365 days a year

Source: *Technical Memorandum, "Potential Impacts on Brickbottom Artist Buildings, Green Line Extension Project."*

- How can a constant, severe noise level of 69.9 dBA not be considered a major impact?
- Why does the research not state the fact that rail-activity noise is episodic, while the noise generated by the Maintenance Facility, in operation 24 hours a day, 7 days a week, 365 days a year, will be a constant source of severe noise?

Lacour / 3

I-196-005

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

The noise assessment section of the document then states:

> *"Noise mitigation such as sound insulation would be provided to reduce indoor noise levels below the 60 dBA threshold for "moderate" noise impacts."*

I-196-006

Brickbottom is a residential structure, not a commercial office building. As such, residents rely on and delight in opening their windows for ventilation whenever possible; it is a basic quality of human shelter.

- How can sound insulation applied to a solid masonry building with operable windows possibly mitigate a "severe" noise condition?
- How can residents expect to live in a condition where the use of operable windows is lost?

I-196-007

With regards to vibration, the document notes that the Green Line main line will pass within 18 feet of the Brickbottom building. *"Vibration mitigation such as ballast mats would be provided to reduce these impacts,"* the document states, using a very declarative and final tone for this complex mitigation issue.

- Does vibration mitigation not require a more complex analysis and solution than the simple placement of a few ballast mats?
- Are vibration impacts not assessed from inside the building, taking into account the harmonic, amplifying qualities of a building complex constructed of concrete, steel, and glass?

I-196-008

The VHB document then discusses impacts on air quality caused by the maintenance facility, stating that *"the facility itself will not generate any additional emissions."* This massive maintenance facility will require significant heating, cooling, and ventilation systems to accommodate the functions outlined in the facility's program as published by EOT. There will be significant runoff from the cleaning and maintenance of vehicles that will contain toxic lubricants, fluids, and detergents.

- What will be the impact from emissions from the tremendous heating, cooling, and ventilation equipment required for an industrial facility of this size?
- What will be the toxic and olfactory impact from the inevitable runoff generated by the maintenance facility?
- What will be the impact of an additional 105 automobiles (based on the number of parking spaces required by the program) entering and leaving the site daily and the associated runoff from these vehicles?

The document then discusses visual impacts.

> *"Based on topography and building heights, the roof of the Artist Buildings would be approximately 16.5 feet higher than the tallest part of the support facility building."*

I-196-006

During preliminary engineering, MassDOT will conduct further analysis for several individual properties. As described in FEIR Chapter 8, MassDOT will then be able to identify the specific measures that will be appropriate for mitigating the Project's noise and vibration impacts.

I-196-007

As indicated in the DEIR/EA Section 5.8, and FEIR Section 5.2, vibration analysis, in accordance with FTA guidance has been conducted for the Project. This analysis involves an assessment of vibration impact and the effectiveness of mitigation measures, such as ballast mats. Vibration levels are assessed inside buildings, taking into account the coupling of vibration from the ground to the building, the potential amplification of vibration on span floors and the reduction of vibration on upper floors. The building coupling effect is based on the type of building construction.

I-196-008

As described in FEIR Chapter 2, the maintenance facility will be an open-air building requiring minimal heating and air conditioning equipment. Runoff systems have been designed to ensure the safe use and disposal of lubricants, fluids, and detergents. The local traffic to the maintenance facilities was included in the air quality analysis.

I-196-009

Again, the logic and appropriateness of this comment are questionable. Residents whose homes are on the second, third, and possibly fourth floors of the Cannery building will face the facility directly; it will be 95 feet from their windows, the only source of light and ventilation for their homes. That the facility falls below the roofline of the Brickbottom complex is irrelevant and misleading in terms of visual impact; the proposed Maintenance Facility will restrict light, air, and view from these homes, severely impacting the quality of life of residents.

- Why was consideration only given to building height, rather than the quality of life of the human inhabitants who abut the proposed facility?
- Were site visits not conducted to determine what uses (i.e., residential) would be directly impacted by the proposed facility?

The document further discusses visual impacts:

> *"Due to the surrounding industrial lots and existing buildings, the Artist Buildings would be the only residential properties facing the support facility. Given the existing industrial and commercial buildings visible from this area, which are similar in type to the support facility, the support facility would result in only a minor change to the local landscape."*

Yes, the surrounding landscape is a mixture of industrial lots and buildings, a landscape which, as residents, we find appealing for their simple, honest, utilitarian forms and harmonious scale. However, the proposed maintenance and storage facility will will not be a part of the local landscape; it *will be* the landscape: it will be all that is visible from three floors of residences in the Cannery building, it will tower three stories over the Foundry building and courtyard, and will obstruct all light and views from the west and north of the Bakery building.

I-196-010

The facility's scale as noted in the report is also misleading. The tallest buildings in the immediate Brickbottom area along Joy and Chestnut Streets are 2 to 3 stories tall, and the tallest building in the Inner Belt area is four stories tall. The much-despised Waste Transfer Station at Poplar and Joy streets is perhaps five stories tall, and is hardly a benchmark for appropriate scale. For illustration, I include VHB's rendering of the proposed "Overbuild Model" for the Maintenance Facility:

I-196-009

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-196-010

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

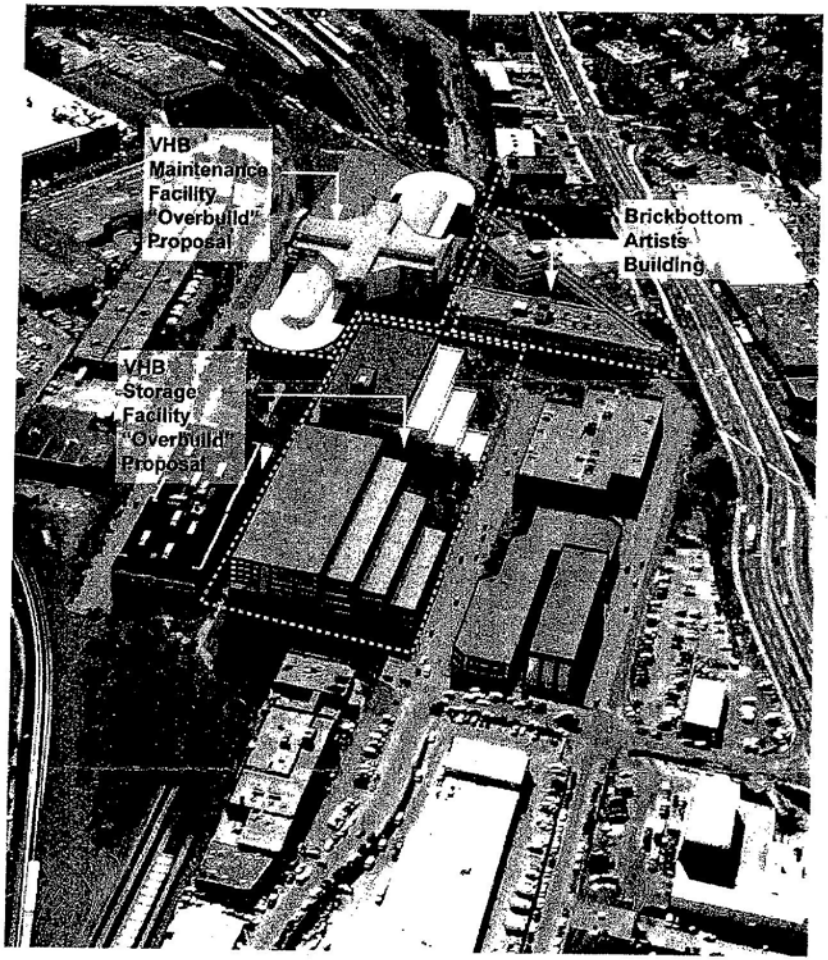


Image source: Maintenance Facility Overbuild, prepared by VHB/Vanasse Hangen Brustlin; www. greenlineextension.org, March 16, 2009.

I-196-011

This proposal not only towers over the Brickbottom complex, introducing an unprecedented scale into Brickbottom/Inner Belt area, but it also obliterates the Foundry building from Brickbottom, fills in the first floor of the remaining two buildings, and eliminates Brickbottom's

Lacour / 6

I-196-011

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-196-011

parking area along Fitchburg Street, a historic way privately-owned and maintained by the the Brickbottom Condominium Trust! Such careless attitude and blatant disregard for not only existing conditions but reality itself once again begs the questions:

- Has VHB conducted any thorough site visits in its research concerning the proposed Green Line Maintenance Facility and its impacts?
- What was the research methodology used in the assessment of the potential impact of the Green Line Maintenance Facility on the Brickbottom Artists Buildings?

I-196-012

The document then concludes:

> *"In the absence of the proposed support facility, the site selected may be redeveloped for other uses that would have similar or greater impacts on the local neighborhood. The proposed support facility building site is zoned for industrial use and other related uses. Somerville zoning would allow a 50-foot-high commercial or industrial building without invoking any special permits, and an existing building permit already issues (sic) for this site would allow a pair of 64-foot-high buildings. ...Based on the City of Somerville's stated plans for redevelopment and the local zoning regulations, future development on this site appears likely and could have a greater overall aesthetic impact on the Brickbottom Artist Buildings than the proposed support facility."*

As reiterated in the DEIR, some other commercial or industrial building may be erected on this site. However, any building other than one proposed and advanced by the Commonwealth of Massachusetts and DOT would undergo a comprehensive, separate environmental impact report; would involve a thorough, transparent public process; and, I assure you, my elected officials at the city and state level would never allow a use on this site that approaches the disastrous impacts and lasting effects that a maintenance and storage facility would impose on Brickbottom and Inner Belt.

I-196-013

The lack of a defined methodology and evidence of thorough research in this document should immediately disqualify the VHB technical memorandum's findings as valid contributors to the DEIR. In light of alternatives such as Mirror Scheme H and Option L that have been proposed subsequent to the VHB technical memorandum, I ask that VHB's findings be re-evaluated, and, more importantly, that the siting of the Heavy Maintenance and Storage Facility be de-coupled or eliminated from the DEIR and subjected to further study and public comment, independent of the final environmental impact study of the Green Line Extension project, and with greater diligence and skill than that demonstrated by VHB.

In considering the potential siting of the Heavy Maintenance and Storage Facility, I ask you to keep in mind that the Brickbottom Artists community represents an internationally-reknown beachhead of creativity, life, and potential in an otherwise barren part of the urban landscape. It could easily provide a lever and model for further development of the greater Brickbottom/ Inner Belt district as a model transit-oriented district based on values of creativity, expression, and sustainability. Placing the Heavy Maintenance and Storage Facility smack-dab in the middle of this area would destroy that potential forever.

I-196-012

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-196-013

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Again, thank you for your support of discussion and comment on this matter. I and my community urge you to reconsider the siting of the Heavy Maintenance and Storage Facility in an area that is mutually agreeable to project requirements, economic development, and human habitation.

Sincerely,



Jayme Lacour

Johnson, Holly (EEA)

From: Laquidara, Donna [Donna_Laquidara@mcgraw-hill.com]
Sent: Thursday, January 07, 2010 3:02 PM
To: Johnson, Holly S (ENV)
Subject: DEIR Green Line Extension Comment Letter
Attachments: DEIR Comment Letter_010810.pdf

Please see the attached letter.

Donna Laquidara-Carr, Ph.D., LEED AP
Manager, Green Research Communications
McGraw Hill Construction
Market Analysis

781-430-2010
donna_laquidara@mcgraw-hill.com
www.construction.com

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January 08, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Via email: Holly.S.Johnson@state.ma.us

Dear Secretary Bowles:

I am a Medford resident writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Cambridge, Somerville and Medford, EEA #13886.

I-197-001

I strongly support the Green Line extension and believe that it should be built in one phase, with a terminus station at Mystic Valley Parkway (Route 16. The DEIR as written should be rejected because it does not comply with the December 1, 2006 MEPA certificate and does not satisfy the mandate to serve the Medford Hillside neighborhood.

The DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford. For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

I-197-002

• **A two-phased approach is unacceptable.** Doing the project in 2 phases will significantly increase the costs. Creating two terminus stations, one for a first phase and a second one later, is a wasteful and foolish approach which will ultimately cost the taxpayers much more. Therefore, the recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified is a bad idea.

I-197-003

• **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will not be fully, or even largely, served if the project terminates at College Avenue. There are five separate Environmental Justice sites within walking distance of the Route 16 terminus that do not have sufficient access to College Avenue to be truly served by a station there. The state has a responsibility to see the project serves those who need it most.

• **Environmental Impact.** Not only would an extension serve several Environmental Justice Communities, it would also allow for the largest ridership, significantly larger than if it terminated at College Ave. The environmental impact of the extension would therefore be much greater. At a time when we need to aggressively reduce our carbon footprint, it is inappropriate to allow short-sightedness to prevent a project with the potential impact of this one, especially as more federal funds are being devoted to public transportation, even in the recently approved FY2010 appropriations.

I-197-004

• **The Route 16 station design in the DEIR is inadequate.** The DEIR design for the Route 16 station is deficient and unworkable. It unnecessarily calls for the taking of two existing buildings that should remain intact with a proper design. The Final EIR should show a realistic and workable design for the Route 16 site.

In conclusion, I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis to go to Route 16 to serve the largest possible population, achieve the maximum ridership, and provide the maximum air quality and environmental benefits to the residents of Cambridge, Somerville, and Medford.

Thank you.

Donna Laquidara-Carr
124 Boston Ave
Medford, MA 02155

I-197-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-197-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is

considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-197-003

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-197-004

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

January 8, 2010

RECEIVED
JAN 8 2010
MEPA

To: Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
EEA #13886
Attn: Holly Johnson
MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Ian Bowles:

First, thank you for the work and energy that you have put into the Green Line Extension project up to this point. I have gone to many of the public meetings and have heard from public officials on this subject and am grateful for that. As a resident of Bartlett Street, approximately 4 blocks from a future T stop, the EIR is incredibly important to me personally. Thank you again for your efforts. I am writing today to recommend that the Draft EIR be approved, with a few modifications.

I believe that it is imperative that this project be completed on time by December 31, 2014. In order for this to happen, design and construction must proceed, but in a thoughtful manner to ensure that full benefits occur from the extension. It is my belief that in order to ensure that this happens, a few critical factors must be noted.

I-198-001 First, I strongly urge a meaningful community advisory process. I believe that community involvement is the only way to ensure a successful Green Line extension project. A project-wide Citizens Advisory Group should be maintained throughout the entire project, including detailed design, engineering, construction and start-up phases. Smaller local advisory groups

I-198-002 should be established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues. Additionally, MEPA should require collaborative planning, with meaningful community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work out of a centrally located field office to maximize access.

I-198-003 Second, I have participated with the Community Corridor Planning group over the past year and strong encourage MassDOT and MEPA to examine and utilize the 11 Core Principles to land use planning regarding the Green Line Extension that were created and ratified by over 300 residents.

I-198-004 I am in strong opposition to the Maintenance Facility site at Yard 8. I strongly urge you to eliminate this Option and to require Mass DOT to carry out a full analysis of the Option L alternatives and Option H for siting the Maintenance Facility. While not perfect, these other two options have much more support in the Somerville and Cambridge communities. Yard

I-198-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-198-002

MassDOT and the MBTA conducted a series of public workshops to gather input on land use and facility design issues from the communities. The workshops were organized around facility locations or groups of locations. All were well-advertised, open to the public and in accessible venues.

I-198-003

MassDOT has reviewed and considered the "Core Community Principles" for station area land use, presented by Community Corridor Planning. As described in the FEIR, Section 6.2 of the Public Involvement Plan, MassDOT will hold land use workshops to discuss related issues with the community.

I-198-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance

I-198-004

8 is opposed by the cities of Somerville and Cambridge and has been vocally rebuked by community residents and business owners at numerous public meetings. It would impose an onerous transportation infrastructure burden on the city that would negatively impact quality of life and preclude economic development of Brick Bottom/Inner Belt. Placing such a structure in Yard 8 would not only negatively impact current residents and businesses, but it would put Somerville at a significant disadvantage for future economic development in this optimal area.

I-198-005

The Community Path must be fully integrated into the design, planning, and construction of the Green Line extension. The Path exemplifies the Federal Transit Administration's new policy on bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The DEIR should state specifically that the extension of the path will be designed by MassDOT as agreed to in February of 2009. It is also essential that the Community Path and the Green Line extensions be built as one project. I personally utilize this path daily, both on bike and on foot and believe that an extension would benefit the Somerville community immensely.

I-198-006

The Mystic Valley Parkway / Route 16 terminus should be designed and constructed at the same time as the rest of the project.

I-198-007

Track design and construction should enable adding future stations – between Lechmere and Washington Street/Union Square, between College Avenue and Route 16, and along a future Green Line extension from Union Square to Porter Square that could serve both Cambridge and Somerville neighborhoods.

I-198-008
I-198-009

Green Line station designs should effectively accommodate bus drop off and pick-up with much attention given to the ease of intermodal connections. Bus routes in Somerville must be aligned to optimize connections to Green Line stations simultaneous to the start of Green Line service. Community input must be gathered regarding the re-routing of bus lines and bus stops before this can happen.

I-198-010

The number of bike racks currently proposed does not meet the needs of the community. The number of riders in and around Somerville, and the increase in riders due to closer proximity to the new T stops, will increase necessitate even more bike racks than we are utilizing in Davis (which, even with their large numbers, are not sufficient). Additionally, all stations should be designed so as to encourage walking and should not impede pedestrian access. An important pedestrian access way will be the Community Path, and thus this infrastructure should be planned for well.

I-198-011

Lastly, it is imperative that the DEIR state clearly how the Maintenance Facility, Storage areas and stations will be sustainable structures. It is my belief that the environmental impact of extending the Green Line should also encompass the use of "green" technology that can be included in the construction of these new structures. This should include creating green roofs on all storage facilities, and utilizing renewable energy technology to power the buildings. Such technology, especially green roofs, will add insulation, sound proofing,

facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-198-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-198-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-198-007

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and

I-198-011

mitigate stormwater issues and decrease the urban heat island effect, not to mention add to the asthetics of the area.

Thank you for taking the time to listen to my concerns.

Sincerely,



Jennifer Lawrence
Somerville Resident
22 Bartlett Street
Somerville, MA 02145

infrastructure design with conceptual future Green Line additions and extensions.

I-198-008

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-198-009

Please see response to Comment I-198-008.

I-198-010

DEIR/EA Appendix D includes methods used to analyze demand for bicycle parking at each Project station. Detailed bicycle parking designs will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

DEIR/EA Section 3.7 describes pedestrian access at each of the proposed stations. In accordance with the Secretary's Certificate on the DEIR/EA, pedestrian access at stations and designed connections to the Community Path will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-198-011

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual designs. Detailed designs for each station, the maintenance facility, and the entire Project will be refined during the preliminary engineering phase. As stated in DEIR/EA Section 3.7, the Project will emphasize low-energy, low-impact, "green" design. The process for coordinating with the local communities during Project design is described in the Public Involvement Plan, Chapter 6 of the FEIR.

Johnson, Holly (EEA)

From: Chris Leary [ctleary@comcast.net]
Sent: Tuesday, January 05, 2010 8:25 PM
To: Johnson, Holly S (ENV)
Subject: Protesting Green line extension DEIR
Attachments: Letter to Sec. Bowles January 6 2010.pdf

Greetings Ms. Johnson,
Please receive this letter addressed to Sec. Bowles in which I strongly urge the secretary to reject the DEIR related to the extension of the Green Line and to proceed with further study.
Thank you for ensuring Sec. Bowles receives my letter.

Regards,
Chris Leary
Medford, MA

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-199-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

I-199-001

Please see Comment Letter I-002.

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings.

MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Christopher T. Leary

Christopher T. Leary
40 Vernon Street
Medford, MA 02155

01/07/2010 13:43 16177302442 PLANNING PAGE 01/01

Jeffrey Robert Levine, AICP
31 Curtis Avenue
Somerville, MA 02144
617-666-4648 blumlevine@gmail.com

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JAN 8 2010
MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181

January 6, 2010

Re: Green Line Extension DEIR EEA #13886

Dear Secretary Bowles:

I am very pleased to see the state move forward on its commitment to extend the Green Line through Somerville. However, I am very concerned to see that the current plans only involve extension to College Avenue. I also agree with many members of the community that the maintenance facility should be moved away from Yard 8.

I-200-001

Most interpretations of the term "Medford Hillside" in the SIP would mean someplace farther west than College Avenue. If the planning process has determined that Winthrop Street – right in the heart of Medford Hillside – is not an appropriate place for a station, than the terminus at Route 16 is the next most logical place. College Avenue is not the best place for a terminal station, even on an interim basis. I remain concerned that any extension to Route 16 is unlikely to be completed once the initial extension is built.

I-200-002

In addition, I would like to offer my support to the work done by the City of Somerville and the Somerville Transportation Equity Partnership with respect to station area planning and the location of a maintenance facility. There is no reason to locate the facility in Yard 8 when there is plenty of space in the area behind the "Big Blue" commuter rail maintenance facility that does not negatively impact present residents of Brickbottom and future commercial development in Inner Belt.

As an aside, there are outstanding commitments made by the MBTA remaining from the MEPA filings related to construction of Big Blue back in the early 1990's – including a commitment to improve drainage in that low-lying area as a benefit. If these commitments are not to be fulfilled, that is even more of a reason to require that a maintenance facility be located on site as a counterbalancing benefit.

Sincerely,

Jeff Levine

I-200-001

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. Analyses indicated that the preferred location would be at College Avenue.

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements required under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions," which are also part of the State Implementation Plan (MassDEP DEIR comment letter, January 8, 2010).

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-200-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further

consideration and Option L is identified as the preferred maintenance facility site.

PAULINE LIM
BRICKBOTTOM ARTISTS BUILDING #C414
1 FITCHBURG ST.
SOMERVILLE, MA 02143-2128
617-623-8842
LIM@PAULINELIM.NET
WWW.PAULINELIM.NET

HJ



29 December 2009

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02114

Re: Yard 8 proposed maintenance facility

Dear Ms. Johnson and members of the committee:

I-201-001 I am writing to voice my horror over the proposed Yard 8 Green Line maintenance facility being built just feet from my neighbors' bedroom windows in the Brickbottom Artists Building. While I support the extension of the Green Line to the long-underserved communities of Somerville and Medford, I urge you to reconsider placement of this facility to a place where it won't RUIN so many lives. We artists are a sensitive bunch; please have mercy: consider Mirror Scheme H or Option L instead. 220 people live at Brickbottom, and there are vast tracts of unused, unpopulated land that would be much better for a noisy, vibrating, 24-hour-a-day facility. Why pick a spot that abuts the ONLY residential building in the area? The DEIR is missing important measurements about impact on Brickbottom, including the noise and vibration in our award-winning courtyard (our only green space) and the south side of the building, which already gets a lot of noise from idling Amtrak and Commuter Rail cars, often at 2 or 3 a.m. Not consulting the Citizen's Advisory Group in evaluating sites for the facility and storage yard is in direct violation of the Secretary's Certificate for community involvement in the project (EENF, *Smart Growth/Land Use*, p.5).

I-201-002

I-201-003

Yard 8 also ruins Somerville's plans to develop the Inner Belt area, cutting off potential commercial tax revenue. Now is the time to stop abusing Somerville, which is burdened by all of the train tracks and none of the stations!

I-201-004 Please give us Brickbottomites direct access to the community path; right now the only access is at Washington St. We have many residents who walk/bike-commute, including myself. I urge you to spare the residents of this vibrant, lively, creative community. Please don't kill our development.

Sincerely,

I-201-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-201-002

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

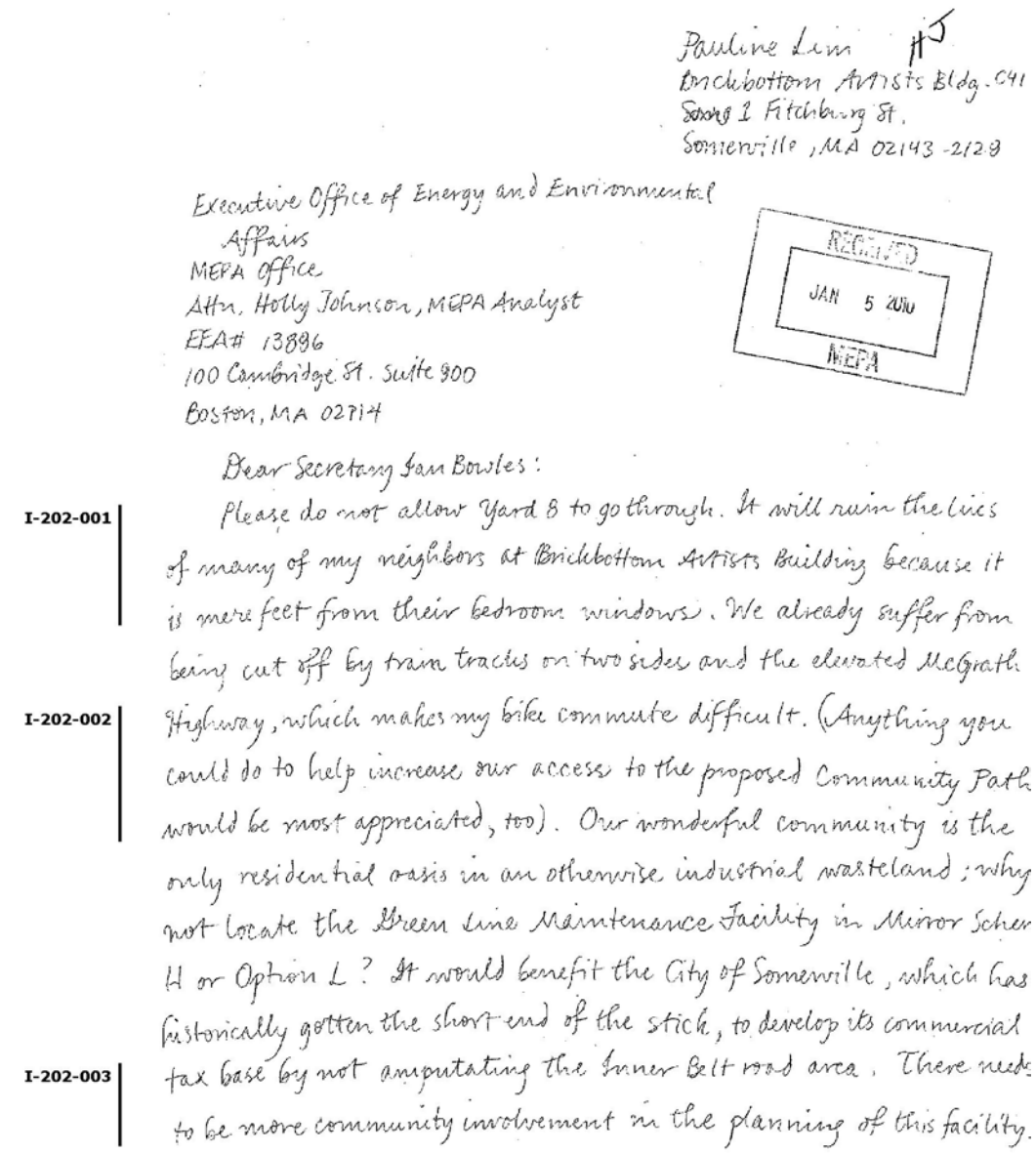
I-201-003

As described in the DEIR/EA Section 1.5.3, throughout the development of the DEIR/EA regular coordination with the Advisory Group and local municipalities on various aspects of the Project, including siting of the maintenance facility, occurred. During the Summer of 2008, tutorials on the proposed maintenance facility as well as site visits to existing maintenance facilities were conducted for Advisory Group members. Additionally, in December 2009 a public meeting was held on the various maintenance facility sites.

I-201-004

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community

Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.



Pauline Lim #5
Brickbottom Artists Bldg. C41
Soong 1 Fitchburg St.
Somerville, MA 02143-2128

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn. Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge St. Suite 900
Boston, MA 02114

RECEIVED
JAN 5 2010
MEPA

Dear Secretary Ian Bowles:

I-202-001 Please do not allow Yard 8 to go through. It will ruin the lives of many of my neighbors at Brickbottom Artists Building because it is mere feet from their bedroom windows. We already suffer from being cut off by train tracks on two sides and the elevated McGrath Highway, which makes my bike commute difficult. (Anything you

I-202-002 could do to help increase our access to the proposed Community Path would be most appreciated, too). Our wonderful community is the only residential oasis in an otherwise industrial wasteland; why not locate the Green Line Maintenance Facility in Mirror Scheme H or Option L? It would benefit the City of Somerville, which has historically gotten the short end of the stick, to develop its commercial

I-202-003 tax base by not amputating the Inner Belt road area. There needs to be more community involvement in the planning of this facility.

I-202-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-202-002

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-202-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-202-004

(2) Brickbottom is the home of 220 residents and is home to the longest-running Open Studios events in the area, and is a pioneer in the country of live-work artist spaces. Please help us to keep it a vibrant (not vibrating) place to live. Protect our only green space, an award-winning garden courtyard, from being blighted by the noise of an abutting facility.

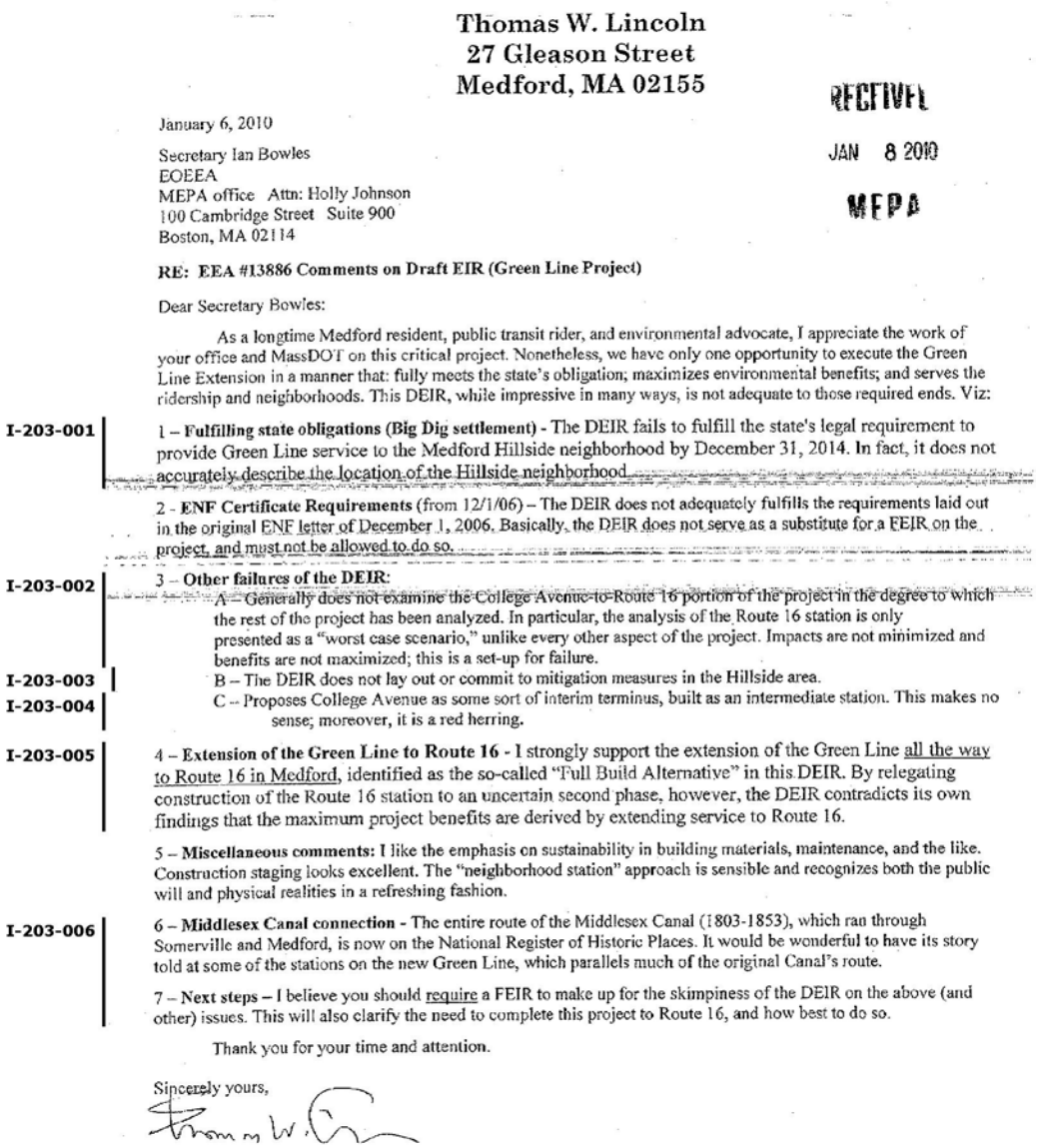
Thank you for your attention to this plea, and thank you for bringing the Greenline to the long-neglected residents of Somerville and Medford. Please be careful where you site this facility, as it will impact our city for many generations to come.

Sincerely,

Pauline Lim

I-202-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.



Thomas W. Lincoln
27 Gleason Street
Medford, MA 02155

RECEIVED
JAN 8 2010
MEPA

January 6, 2010

Secretary Ian Bowles
EOEEA
MEPA office Attn: Holly Johnson
100 Cambridge Street Suite 900
Boston, MA 02114

RE: EEA #13886 Comments on Draft EIR (Green Line Project)

Dear Secretary Bowles:

As a longtime Medford resident, public transit rider, and environmental advocate, I appreciate the work of your office and MassDOT on this critical project. Nonetheless, we have only one opportunity to execute the Green Line Extension in a manner that: fully meets the state's obligation; maximizes environmental benefits; and serves the ridership and neighborhoods. This DEIR, while impressive in many ways, is not adequate to those required ends. Viz:

I-203-001 1 – **Fulfilling state obligations (Big Dig settlement) -** The DEIR fails to fulfill the state's legal requirement to provide Green Line service to the Medford Hillside neighborhood by December 31, 2014. In fact, it does not accurately describe the location of the Hillside neighborhood.

2 - **ENF Certificate Requirements** (from 12/1/06) – The DEIR does not adequately fulfills the requirements laid out in the original ENF letter of December 1, 2006. Basically, the DEIR does not serve as a substitute for a FEIR on the project, and must not be allowed to do so.

I-203-002 3 – **Other failures of the DEIR:**

A – Generally does not examine the College Avenue-to-Route 16 portion of the project in the degree to which the rest of the project has been analyzed. In particular, the analysis of the Route 16 station is only presented as a "worst case scenario," unlike every other aspect of the project. Impacts are not minimized and benefits are not maximized; this is a set-up for failure.

I-203-003 B – The DEIR does not lay out or commit to mitigation measures in the Hillside area.

I-203-004 C – Proposes College Avenue as some sort of interim terminus, built as an intermediate station. This makes no sense; moreover, it is a red herring.

I-203-005 4 – **Extension of the Green Line to Route 16 -** I strongly support the extension of the Green Line all the way to Route 16 in Medford, identified as the so-called "Full Build Alternative" in this DEIR. By relegating construction of the Route 16 station to an uncertain second phase, however, the DEIR contradicts its own findings that the maximum project benefits are derived by extending service to Route 16.

5 – **Miscellaneous comments:** I like the emphasis on sustainability in building materials, maintenance, and the like. Construction staging looks excellent. The "neighborhood station" approach is sensible and recognizes both the public will and physical realities in a refreshing fashion.

I-203-006 6 – **Middlesex Canal connection -** The entire route of the Middlesex Canal (1803-1853), which ran through Somerville and Medford, is now on the National Register of Historic Places. It would be wonderful to have its story told at some of the stations on the new Green Line, which parallels much of the original Canal's route.

7 – **Next steps –** I believe you should require a FEIR to make up for the skimpiness of the DEIR on the above (and other) issues. This will also clarify the need to complete this project to Route 16, and how best to do so.

Thank you for your time and attention.

Sincerely yours,

Thomas W. Lincoln

I-203-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

I-203-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can

be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-203-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-203-004

In accordance with the Secretary’s Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-203-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input

on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-203-006

The Middlesex Canal is adjacent to the proposed Mystic Valley Parkway/Route 16 station. When that station is constructed, a narrative panel describing the history of the canal could be incorporated into the station.

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Johnson, Holly (EEA)

From: Stephen Paul Linder [spl@cs.dartmouth.edu]
Sent: Tuesday, January 05, 2010 4:07 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886 feedback
Attachments: Draft Enviromental Impact feedback.pdf

Please find an attached letter in PDF-format.

Thank you,
Stephen

--
Dr. Stephen Paul Linder
518-569-3933
---
http://alum.mit.edu/www/spl

Dr. Stephen Paul Linder
136 Grove Street
West Medford, MA 02155

January 5th, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-204-001

I strongly support the extension of the Green Line to Medford. The extension will help me reduce the number of automobile trip I take and will greatly reduce the motor vehicle traffic through my neighborhood and the rest of Medford. However, to achieve this in an effective manner the Green Line terminus must at a minimum be at Route 16 and optimally in West Medford with connections to the existing commuter rail.

The DEIR does not adequately and properly comply with the environmental review process. I moved to Medford in part to be able to access mass transit into Cambridge. Little did I realize how underserved western Medford is by transit. My neighbors and colleagues almost exclusively drive to work in Boston and Cambridge because the train and bus connection are slow and inconvenient. The commuter rail is only convenient for those traveling during rush hour and for those traveling to downtown Boston. The connection to Cambridge is so inconvenient that when ever I have to work late (and the conditions do not allow for biking) I must drive to Kendall Square.

The DEIR does not adequately address how we get Medford citizens out of their cars. If we assume that most commuters will not give up their cars if their walk is more than half mile, and that their commuting time is more than 50% longer, the College Avenue terminus will not get many people living in Medford out of their cars. The majority of users of that station will be students at Tufts; students who already walk and ride bikes. Additionally a College Avenue terminus is not easily accessible from the rest of Medford by bicycle. The streets leading to the station are narrow, have many cross streets, and have a high volume of

I-204-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

commuter traffic. A light rail station at Route 16, would allow many more of my neighbors to consider taking mass transit. This would have and immediate positive impact on Medford Hillside because fewer of my neighbors would be commuting down Boston Avenue and through the other streets of Somerville. (Locals do not avail themselves of Route 93 because of the heavy traffic during rush hour.)

The DEIR show a lack of imagination and a lack of commitment to provide transportation that is both environmentally friendly and pleasant. Only minimal effort was given in the preliminary designs to improving people's commuting experience. If you want people to get out of their cars you need to make the alternative pleasant, convenient and allow for side trips for errands on the way home.

If we are to actually improve the environment of Medford and Somerville we need to be much more ambitious. Historically the mass transit options for West Medford and Medford Hillside included trolley service and train service. Stations since then have been closed, tracks ripped up, schedules degraded, and with the ever increasing number of cars on the road, bicycling seems like a dangerous alternative. The following improvements should also be addressed to bring Medford into compliance with the spirit of the original consent decree, partially restore the level of transit service to historical levels, and all at much smaller cost than a single exit ramp for the Big Dig:

I-204-002 1. Connect the Green Line and commuter rail. Without this, folks from Woburn and Winchester who commute through Medford and Somerville, would still be driving because of the difficulty in commuting between North Station and Cambridge. People working at Tufts would also continue to drive. If the Orange Line can support stations with both rail and subway platforms, why not the Green Line?

I-204-003 2. Make the stations pedestrian and bike centric and not car centric. Include bike paths that allow commuters who live more than a half mile from the station easy access to the station.

I-204-004 Have the Route 16 terminus straddle Route 16 so that pedestrians and cyclist can access from both sides of the roadway. Provide a pedestrian bridge and path to Fortunato Drive to reduce the walk from 0.5 to 0.1 mile

I-204-005 Provide pedestrian access from College Ave Station to Burget Avenue. Without this access a commuter will add 0.8 mile to their walk to the train station and the walk will be on busy street instead of a pleasant side street. Do not provide car drop off at the College Avenue. The intersection is already one of the most difficult in Somerville/Medford.

I-204-006 3. Instead of making a Route 16 terminus in a second phase, require a second phase that extends the Green Line to West Medford. This phase would greatly improve safety by

I-204-002

Opportunities for a shared station between the Green Line Extension (on the Medford Branch) and MBTA Commuter Rail were evaluated for the Project. This connection was ultimately dismissed, as described in DEIR/EA Section 3.3, and Appendix B. While the potential for a joint station at Union Square would need to be studied further, it is not currently part of the Proposed Project. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain. However, as the Project advances into preliminary engineering, opportunities for future additions and extensions of service will be considered.

I-204-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-204-006

removing the two at-grade railroad crossing, raising and covering the platforms, and provide a pedestrian underpass so that commuters no longer have to cross the tracks.

I-204-007

4. Bring the commuter rail up to contemporary standards, improving the safety, convenience, and speed. Electrify the commuter rail, raise platforms, and add a stop at the Cambridge side of the Charles River.

It is my hope that with these improvements will reduce Medford's reliance on cars, just as the Red Line extension to Davis Square transformed that neighborhood.

Thank you for your time and patience.

Sincerely,

Dr. Stephen Paul Linder

I-204-004

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-204-005

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station, including access from Burget Avenue via Tufts property, will be further evaluated during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-204-006

As part of the 2005 Beyond Lechmere MIS/AA, an extension to West Medford was considered but dismissed from further consideration. As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-204-007

MBTA Commuter Rail operations and station design are outside the scope of the Green Line Extension Project. The conceptual future electrification of MBTA commuter rail lines in the Study Area is beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail. Opportunities for a shared station between the Green Line Extension and MBTA Commuter Rail were evaluated for the Project. This connection was ultimately dismissed, as described in DEIR/EA Section 3.3, and Appendix B, Section 5. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain.

Johnson, Holly (EEA)

From: sh.lipsky@comcast.net
Sent: Friday, January 08, 2010 4:46 PM
To: Holly S Johnson
Subject: Comments on Green Line Extension DEIR

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I would like to thank all the MEPA agency employees involved in producing the DEIR for all of their hard work leading up to this document, including your patience and good humor during the neighborhood public meetings that you have held throughout these last years.

As a resident of Somerville, I support the Green Line extension's stopping at College Avenue as outlined in the current DEIR. I believe that this fulfills the state's legal obligation to provide public transit services to Somerville.

I-205-001

However, I am opposed to the proposed Rte. 16/Mystic Valley Parkway terminus in two years. I have serious misgivings about the Green line extension going beyond College Avenue through what is mostly a densely built residential area composed of two-family homes constructed almost one hundred years ago. I am opposed to a terminus being situated in a mostly residential neighborhood that abuts the Mystic River when there already is a commuter train station in West Medford, which is a ten-minute walk away from this proposed site. I believe that the traffic, noise, air quality, and environmental issues that would result from this terminus on Rte. 16 would result in the environmenta devastation of a thriving neighborhood that the residents of West Somerville and West Medford share.

The impact of the proposed Rte. 16 extension will affect this largely residential West Somerville/ Wes Medford neighborhood on many levels: noise, vibration, traffic, air quality, parking, the taking of private property, and the environmental impact on historical areas that abut the extension, including this section of the Mystic River and its historical bridge and parks, and the historical churches situatec along Boston Avenue in West Medford.

I-205-002

Increased traffic along Mystic Valley Parkway and Boston Avenue is a particular problem. There are numerous accidents at the intersection of Rte. 16 and Boston Avenue and in recent years, an increasing number of pedestrian fatalities at Somerville and Medford intersections on streets that cross Boston Avenue near Rte. 16. These are important statistics to review because there are three

1

I-205-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-205-002

Traffic and pedestrian operations in the vicinity of Route 16 were throughly evaluated as part of the DEIR/EA. Pedestrian timings throughout the study area as proposed are being modified to better accommodate disabled and elderly pedestrians in accordance with the Americans with Disabilities Act and associated state regulations. Overall, because the Green Line is projected to remove traffic from local roadways, traffic congestion and the associated Air Quality emissions are projected to be reduced. Where traffic impacts are noted (due to pick-up and drop-off activity associated with the stations) mitigation has been recommended to offset these impacts.

I-205-002

elderly housing complexes that will be situated near the Rte. 16 terminus: Walking Court in Medford, and Somerville's 99 one-bedroom units in their newly constructed VNA building, and Somerville Elderly Housing Authority Capen Court's new building of 95 units. Pedestrian safety in this area needs to be reviewed more closely because of these new buildings and the increased number of pedestrians, many of them elderly.

Car traffic in this area is another issue that needs further study. The impact of the increased amount of traffic that will travel on Boston Avenue through both sides of the Mystic River in West Medford needs further study regarding air quality and other environmental issues. An analysis of increased traffic on the Mystic Valley Parkway bridge that is opposite from Whole Foods as cars approach Boston Avenue from the north is also needed. The air quality of this increased traffic along Rte.16 from Rte. 93 to Boston Avenue would also need to be analyzed.

I-205-003

Another problem is storm water and its impact on the Mystic River near this site, particularly the impact of the current work that is being done on Alewife Brook to mitigate flooding on its shores. Studies indicate that Alewife's water will be pushed down to where it intersects with the Mystic, and the current U-Haul site is in the area just below the point where Alewife joins the Mystic River. This would add to the impact of the water issues studied in the current DEIR.

To summarize, I support the Green Line extension's stopping at College Avenue. I believe that this fulfills the state's legal obligation to provide public transit services to Somerville. I am strongly opposed to the proposed Rte. 16/Mystic Valley Parkway terminus. Further environmental analysis needs to be done in this area than has been done in the DEIR in its current form.

Thank you.

Suzanne Lipsky

2

I-205-003

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

EEA# 13886

Green Line Extension

Dear Secretary Ian Bowles,

I-206-001

I am very happy to hear that the Green Line will be easy to Somerville, With 7 new stations, transportation will be much easier than it is now since the Red Line in Davis Square is the closest station to my house and it is FAR very far. Not only will it provide me with more convenient means of transportation, but I can travel more safely, knowing that I will not have to walk long distances during late hours or in bad weather. It could also bring a lot more people to our already diverse community, which could improve our community even more. A bikeing or walking path would definitely make the Green Line easier to use, and I would be more encouraged to use the Green Line if it is easy and safe to access. Having community meetings concerning the Green Line is also very helpful because it gives people like me a chance to have a voice in things that impact their community.

Sincerely,

Anthony Lorenzo

Somerville, MA, 02143, Grade 10

I-206-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Johnson, Holly (EEA)

From: Kay Canavino Photography [studio@kaycanavino.com]
Sent: Wednesday, January 06, 2010 1:58 PM
To: Johnson, Holly S (ENV)
Cc: Robert Martel
Subject: DEIR Number EEA#13886

Secretary Ian Bowles
Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Reference to Project Number EEA #13886

Dear Secretary Bowles:

We are writing in regards to the Draft Environmental Impact Report on project Number EEA#13886 (regarding the Green Line Extension Maintenance Facility and Storage Yard alternatives in Somerville).

I-207-001

We are opposed to siting the Green Line Train Storage Yard and Maintenance Facility in Yard #8. An alternative site, such as "Mirror H" which is farther away from the Brickbottom neighborhood should be considered.

While the Green Line Extension has community value, it seems unjust to ask the residents of East Somerville and the Brickbottom district, which includes many families and senior citizens, to bear the disproportionate environmental impact of noise, vibration, light and contaminant pollutants. In addition, they would be impacted by any hazardous materials accident. Also, by taking 11.5 acres of privately held land that is already permitted and zoned for development, potentially significant future tax revenue will be lost to the City of Somerville.

I-207-002

In addition, the DEIR report's current mitigation provisions in the case of the Brickbottom Artists Building at 1 Fitchburg Street does not allow for noise barriers or containment in relation to the storage yard (only 40 out of 155 residences are designated for soundproofing). The mitigation requirements should be more adequately studied for construction and permanent impact with a complete cost analysis and deadlines for fulfillment. Also, there needs to be a process in place to address mitigation problems during construction and after the fact. A citizen advisory committee (CAC) should be established which would allow for community members to review the project, address community concerns and seek redress if specific goals are not met.

In 1988, after the Brickbottom Artists Building was proposed and accepted by the City of Somerville, the artists helped rejuvenate an abandoned area. It is morally inexcusable, after 22 years, to allow an environmental disaster to happen to a community that has contributed to the cultural, economic and political fabric of Somerville and beyond.

Sincerely,

Patricia Lyga
Kay Canavino

Owners, One Fitchburg Street, B251, Somerville, MA 02143

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I-207-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-207-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8. In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Secretary Ian Bowles
Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Reference to the Project Number EEA #13886

Dear Secretary Bowles:

We are writing in regards to the Draft Environmental Impact Report on project Number EEA#13886 (regarding the Green Line Extension Maintenance Facility and Storage Yard alternatives in Somerville).

I-208-001

We are opposed to siting the Green Line Train Storage Yard and Maintenance Facility in Yard #8. An alternative site, such as "Mirror H" which is further away from the Brickbottom neighborhood should be considered.

While the Green Line Extension has community value, it seems unjust to ask the residents of East Somerviille and the Brickbottom district, which includes many families and senior citizens, to bear the disproportionate environmental impact of noise, vibration, light and contaminant pollutants. In addition, they would be impacted by any hazardous materials accident. Also, by taking 11.5 acres of privately held land that is already permitted and zoned for development, potentially significant future tax revenue will be lost to the City of Somerville.

In addition, the DEIR report's current mitigation provisions in the case of the Brickbottom Artists Building at 1 Fitchburg Street does not allow for noise barriers or containment in relation to the storage yard (only 40 out of 155 residences are designated for soundproofing). The mitigation requirements should be more adequately studied for construction and permanent impact with a complete cost analysis and deadlines for fulfillment. Also, there needs to be a process in place to address mitigation problems during construction and after the fact. A citizen advisory committee (CAC) should be established which would allow for community members to review the project, address community concerns and seek redress if specific goals are not met.

In 1988, after the Brickbottom Artists Building was proposed and accepted by the City of Somerville, the artists helped rejuvenate an abandoned area. It is morally inexcusable, after 22 years, to allow an environmental disaster to happen to a community that has contributed to the cultural, economic and political fabric of Somerville and beyond.

Sincerely,

Patricia Lyga Kay Canavino

Patricia Lyga
Kay Canavino

Owners, One Fitchburg Street, B251, Somerville, MA 02143

I-208-001

Please see Comment Letter I-207.

Max E. Malaret
169 Monsignor O'Brien Hwy, Apt. 401
Cambridge, MA 02141

RECEIVED
JAN 7 2010
MEPA

January 7th, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-209-001 As a resident & owner at the Glass Factory Condominiums I would like to use this opportunity to express some concerns that I have regarding the Green Line Extension Project and the potential consequences that it may have on our building and the value of our apartments.

1) Proximity of the Tracks to Our Building:
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

2) Design and Location of the New Lechmere Station:
As of now, it is unclear how the new station will look like and where it will be located. Given that Lechmere is the gateway between Boston and Cambridge the design of the station should be of a high standard such as that of the new Charles MGH station. It should be easy to the eyes, functional and environmental friendly. Regarding the location of the new station, it should be placed as far as possible from the Glass Factory in order to minimize the negative effects of excess traffic of people and vehicles around the building.

3) Location of the Maintenance Facility:
I do not agree with locating the new maintenance facility in the Mirror H location. This location is very close to our building and will only increase the negative impact that the tracks, which are supposed to be built just a few feet away from the back of the Glass Factory, will generate.

I-209-001

Please see Comment Letter I-013, plus additional response below.

4) Noise and Vibration Impact:
The Glass Factory will be affected by additional noise and vibration due to the new tracks that will run behind the building. It is extremely important that additional resources are budgeted in order to minimize these impacts during and after the execution of the project.

5) Increased Buss Traffic and fumes:
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

I-209-002

6) Environmental Impact:
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks.

Thank you very much in advance for taking these concerns into account and I'm sure that by working together the community, the Massachusetts Department of Transportation and the Glass Factory residents and owners will get the most benefit out of this important project.

Sincerely,

Max E. Malaret

I-209-002

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. Station plans will be further developed in the preliminary engineering phase of the Project, with additional consideration given to urban design and the pedestrian environment under the trackway areas. Along the back side of the Glass Factory, fencing is currently proposed to minimize trespassers crossing the existing Glass Factory parking area and will be further evaluated during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

From: 01/08/2010 17:06 #016 P.001

faxed 10:53 AM 1/8/10

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-210-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-210-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Signature

Maia Namulashvili
Print Name

165 Monsignor O'Brien Hwy #801.
Address

Johnson, Holly (EEA)

From: Robert Mantell [rmantell@Theemploymentlawyers.com]
Sent: Thursday, January 07, 2010 10:02 AM
To: holly.s.johnson@state.ma.us
Subject: Green Line Extension Draft EIR (EEA #13885

Dear Secretary Ian Bowles and Holly Johnson:

I-211-001

I am writing to express my support for the Green Line extension into Somerville and Medford, and in support for the speedy design and extension of the Somerville Community Path.

I am an eighteen-year resident of Somerville, and I know that these projects will bring great benefits to the area, including greater options for bicycling and public transportation.

Thank you for considering these projects, and I would appreciate any efforts toward implementation.

Robert S. Mantell
Rodgers, Powers & Schwartz LLP
18 Tremont St.
Suite 500
Boston, MA 02108
617 742-7010, ext. 305
RMantell@TheEmploymentLawyers.com

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I-211-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able at this point to commit to funding the construction of the Community Path.

Charles J. Marquardt
10 Rogers Street Unit 1120
Cambridge, MA 02142

November 11, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I am writing to you as a resident of East Cambridge to express my concerns and those I have heard from neighbors and visitors about the planned move of the Lechmere T station from its current location to a location on the other side of the McGrath Highway.

I-212-001

Lechmere Square and its MBTA station serves as the gateway to East Cambridge and an integral hub of our neighborhood. The station serves the vast bulk of the neighborhood's residents transportation needs as well as serving as a vital link to the Cambridge Galleria, a shopping mall located on First Street which draws well in excess of 1 million visitors annually. The planned relocation of a station serving so many commuters to the other side of a major highway calls for careful consideration of the methods by which commuters will be asked to cross Monsignor O'Brien Highway to reach the new station.

The principal concern with regard to the crossing of Monsignor O'Brien Highway is safety. We have been told that building an elevated pedestrian crossing or pedestrian bridge is too costly for the project so we will have to make do with street level crossings. I will take each of these issues in turn:

I-212-002

1. Elevated Pedestrian Crossing and Costs – The cost of building an elevated crossing to provide for the safe crossing of East Cambridge residents and guests has been described as being too costly and not within the budget of the Lechmere Station relocation plan. I would respectfully request that this analysis be reconsidered in light of recent news reports of an elevated crosswalk being considered for construction in Foxboro to connect two

I-212-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-212-002

The roadway and pedestrian improvements proposed for O'Brien Highway in the vicinity of Lechmere Station are the same improvements recommended by the NorthPoint development project. A pedestrian overpass was not included in this project. Based on discussions with the City of Cambridge, which was closely involved in the development of the traffic improvements, a pedestrian overpass was considered but eliminated from further consideration due to costs, safety, and practicality concerns. Route 1 at Gillette Stadium/Patriot Place is a high-speed highway with few intersections. O'Brien Highway is a wide urban street near Lechmere Station with signalized intersections.

Page 2

I-212-002

parking lots on either side of Route 1 near Gillette Stadium at a reported cost of $9 million. I would respectfully suggest that the daily safety of the residents of East Cambridge and visitors is more worthy of such a structure than a stadium which will use it for at most a small fraction of the time such a structure would be used in East Cambridge. Surely the great residents of East Cambridge deserve as much, if not more, consideration for a pedestrian overpass than parking lots on Route 1.

I-212-003

2. Street Level Crossing and Pedestrian Safety – The development of the new station will require East Cambridge residents to cross Monsignor O'Brien Highway with its 6+ lanes of traffic if the construction of a pedestrian footbridge (see #1 above) is not feasible. In light of the accident just this morning where a pedestrian was struck in Boston on Tremont Street I would respectfully request that all measures be taken to ensure that street level crossings are implemented with the safety and security of the commuters using the new Lechmere Station in mind. Measures for consideration include:

   a. Timing for Crossing Intersection – Many of our elder residents use the station and require additional time to safely navigate a street level crossing. The age and continued increase in the average age of our residents needs to be heavily factored into the light cycle timings at the new crossings;
   b. Maintenance and Snow Removal – The streets, sidewalks and buildings in the new station plan fall within several jurisdictions that need to coordinate their upkeep and maintenance. These plans need to be developed prior to the station opening so that all parties involved will know who is responsible for which activities so that there can be no confusion after the station opens and the first snow storm hits.
   c. Enforcement – With such a large and expansive crossing on a major highway there will be the need to remain vigilant in monitoring and enforcing traffic rules and regulations. This will be a critical component in keeping the users of the new station safe in their daily crossing of the Monsignor O'Brien Highway. Enforcement plans should be a factored considered when developing the station crossing plans.
   d. Materials and Lighting – I would anticipate the development team utilizing the most appropriate materials for security of footing and visibility when developing the plans for the crossings and the station itself. This will be critical in helping to ensure that the pedestrian crossing is clearly marked and delineated for not only those walking across the Monsignor O'Brien Highway but those driving on it as well.

I-212-004

The design of the new station is also a concern. The preliminary design shown to residents at a recent meeting was not well received. The new Lechmere Station

I-212-003

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-212-004

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-212-004

appears to be the only station on the Green Line Extension Project where patrons will be asked to purchase Charlie Cards outside in the elements as all the other stations appear to have their Charlie Card stations within the station interior safely out of the elements. (This has caused many to question the treatment of East Cambridge vis-à-vis the rest of the Green Line users.) A large part of this issue seems to come from the lack of a lobby in the current Lechmere Station plans. In addition, the entrance of the new Lechmere Station is not convenient to anyone coming from the East Cambridge neighborhood or the Mall. In fact, the only entrance to the new Lechmere Station appears to be in the most inconvenient location possible for the vast bulk of users coming from East Cambridge and the Galleria Mall. I strongly suggest that there needs to be more than one entrance with easy access for the handicapped.

I-212-005

Finally, after many years of promises of a new Lechmere Station, the MBTA has the opportunity not only to build a station that helps enhance the gateway to East Cambridge but also to provide further benefit to the neighborhood of East Cambridge. This benefit would come in the form of the redevelopment of the historic station buildings currently in use into a covered market and outdoor warm weather market that could benefit the entire neighborhood. A small and dedicated group of residents has been working on plans whereby this goal could be accomplished while maintaining the available development potential in terms of buildable square feet. A lively square/market area will make crossing two busy streets easier for those using public transportation and will add to the value of the area. Make Lechmere a destination not a transition point.

Thank you for your consideration.



Charles J. Marquardt

I-212-005

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

Johnson, Holly (EEA)

From: Charles Marquardt [cmarquardt2@mac.com]
Sent: Thursday, January 07, 2010 7:42 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension DEIR Comment Letter - Charles Marquardt
Attachments: Marquardt EEA#13886 010710.pdf

Ms., Johnson

Please find attached my comment letter on the DEIR for the Green Line Extension Project.

Please let me know if you have any questions.

Thanks

Charlie

Charles J. Marquardt
10 Rogers Street Unit 1120
Cambridge, MA 02142

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MEPA

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension, EEA #13886.

I wholeheartedly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner. This would include building the project in one phase to a terminus station at Mystic Valley Parkway, locating the Maintenance Facility in an area that not only meets the Green Line's requirements but also takes into account the needs of the neighborhoods effected by the Maintenance Facility as well as the environmental justice and equality of the final location for the Maintenance Facility, and constructing stations and other aspects of the project that provide opportunities for economic development and regional benefits that can last for generations.

I-213-001

I believe that it is in the best interest of the project and the many and varied communities that it serves that the DEIR be accepted as a Final Environmental Impact Report (FEIR) thereby allowing design and other necessary work to begin immediately. However, there remain several issues in the DEIR that have resulted in some to call for the DEIR not to be accepted as the FEIR. I believe that such an approach would add unnecessary delay and cost to this critical project. Rather, I would propose that the items requiring additional analysis and community input and review be handled via either an addendum to the DEIR/FEIR or as a supplement to the DEIR/FEIR.

The issues that require additional consideration as the project continues on its path and warrant further review and analysis and therefore inclusion in an a supplemented DEIR / FEIR include:

I-213-002

- Additional analysis of the location of the Maintenance Facility including the elimination of the Yard 8 Option and the full analysis of Scheme L, Alternate Scheme L and the use of the Boston Engine Terminal (BET) facility;

I-213-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-213-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-213-003
- Commitment to a significantly enhanced public participation process particularly as it relates to station designs and area mitigation concerns;

I-213-004
- Integration of the Green Line Extension Project with other area development efforts including community paths, neighborhood developments and planned or potential development opportunities at Brick Bottom, Inner Belt, North Point and other neighborhoods;
- Coordinate efforts to ensure that the calming of the McGrath/O'Brien Highway in Cambridge & Somerville is achieved;
- Ensure that the potential opportunities presented by the relocation of the current Lechmere Station and redevelopment of the existing Lechmere Station are achieved in a manner that benefit both the MBTA / MassDOT and the Cambridge / Somerville neighbors;

I-213-005
- Ensure that the complete design and construction of the extension up to and including the Mystic Valley Parkway / Route 16 terminus is part of a single unified project rather than as separate components to be completed at some later date.

These items and other comments are discussed in more detail below.

Integrated Development Plan

I-213-006
The project and DEIR does not include an integrated development plan for the region impacted by the project. The Green Line Extension is a once in a generation project and will most likely be the largest project undertaken by MassDOT and the MBTA this decade. It will intersect or overlap with significant development opportunities across its entire track, including North Point, Brick Bottom, Inner Belt, Union Square and the Medford Hillside to name just a few. As such, this project has the opportunity to greatly benefit the region and these development opportunities if done properly. However, the project also has the capacity to significantly hinder or imperil the development opportunities along its track if not properly coordinated. As there is no integrated development plan at this time, it is my concern that the project would hamper promising development. As such, I strong encourage you to require that the project incorporate an integrated regional development plan to ensure maximization of benefits from this project and its interaction with other development opportunities, public and private.

Integrated Transit Plan

I-213-007
In much the way that the project interacts and impacts the development opportunities along its path so too does it impact transit opportunities along and crossing its planned route. It is my concern that without an integrated transit plan that takes into account all modes of transit along the planned path of the project we will miss opportunities to further benefit the region and move commuters to more environmentally friendly and efficient modes of transportation. The DEIR and project need to consider, among other projects or potential projects, community

I-213-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-213-004

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-213-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-213-006

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the

I-213-007

paths (bike, walking, etc.), connections between planned and potential development projects (e.g. connecting North Point with the Inner Belt), other MassDOT projects over the coming decades to ensure that consideration for these efforts are incorporated in this project to limit need for future rework and redevelopment.

Achieving Stated Environmental Goals

I-213-008

The achievement of the environmental goals outlined for the Green Line Extension requires service is provided to the Medford Hillside Neighborhood. The goals will not be achieved with the cessation of the extension with a College Ave Station. The goals will be achieved with the complete development of the extension to Mystic Valley Parkway / Route 16. It is critical to the success of the project and the achievement of the environmental mitigation goals provided in the project that MassDOT undertake the extension of the Green Line to Mystic Valley Parkway as a single unified project and not a series of disjointed projects that may or may not get completed and, if completed, would result in additional costs to the state.

Community Involvement

I-213-009

I strongly recommend that the project and MassDOT be required to utilize collaborative planning, with community involvement and public coordination. The project has developed a workable web site and staff availability for questions and related matters has been good. However, as the project moves forward I would recommend staffed field offices be required to address resident concerns and facilitate involvement.

I would expect a Citizens Advisory Group for a project of this size and scope. Yet, there has yet to be one established. Therefore, I would recommend a project-wide Citizens Advisory Group be maintained throughout detailed design, engineering, construction and start-up phases with additional smaller local advisory groups established for specific station design, land use, connectivity, construction and mitigation issues.

Station Design and Location

I-213-010

I strongly encourage the project develop plans to ensure that Green Line stations integrate seamlessly with all other clean modes of transportation, including current and re-routed buses. Station design should accommodate bus drop off and pick-up with maximum integration of transit modes and minimal street disruption.

I-213-011

I strongly encourage station designs that allow for car drop off, but not parking, and present ease of pedestrian and bicycle access by location of stations on major streets whenever possible, with station access from both sides of the street and in all direction of travel with multiple entry and exit points from the stations

presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-213-007

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-213-008

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-213-009

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green

I-213-011

I strongly encourage the use of a formal community process to design the stations to ensure that they fit within the neighborhood and meet with existing and future development plans. Many neighborhoods along the extension have already expressed preferences and proposed modification to the initial station designs to enhance functionality and increase use. This activity should be encouraged as it is one way to grow additional proponents of the plan and drive increased use of the public transit system.

Lechmere Station Relocation, Design and Future Use of Existing Station

I-213-012

Lechmere Square and its MBTA station serves as the gateway to East Cambridge and an integral hub of the neighborhood. The station serves the vast bulk of the neighborhood's residents transportation needs as well as serving as a vital link to the Cambridge Galleria, a shopping mall located on First Street which draws well in excess of 1 million visitors annually. The planned relocation of a station serving so many commuters to the other side of a major highway calls for careful consideration of the methods by which commuters will be asked to cross Monsignor O'Brien Highway to reach the new station.

The principal concern with regard to the crossing of Monsignor O'Brien Highway is safety. The development of the new station will require East Cambridge residents to cross Monsignor O'Brien Highway with its 6+ lanes of traffic I would respectfully request that all measures be taken to ensure that street level crossings are implemented with the safety and security of the commuters using the new Lechmere Station in mind. Measures for consideration include:

I-213-013

a. Timing for Crossing Intersection – Many of our elder residents use the station and require additional time to safely navigate a street level crossing. The age and continued increase in the average age of our residents needs to be heavily factored into the light cycle timings at the new crossings;
b. Maintenance and Snow Removal – The streets, sidewalks and buildings in the new station plan fall within several jurisdictions that need to coordinate their upkeep and maintenance. These plans need to be developed prior to the station opening so that all parties involved will know who is responsible for which activities so that there can be no confusion after the station opens and the first snow storm hits.
c. Enforcement – With such a large and expansive crossing on a major highway there will be the need to remain vigilant in monitoring and enforcing traffic rules and regulations. This will be a critical component in keeping the users of the new station safe in their daily crossing of the Monsignor O'Brien Highway. Enforcement plans should be a factored considered when developing the station crossing plans.

Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-213-010

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-213-011

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR,

I-213-013

d. Materials and Lighting – I would anticipate the development team utilizing the most appropriate materials for security of footing and visibility when developing the plans for the crossings and the station itself. This will be critical in helping to ensure that the pedestrian crossing is clearly marked and delineated for not only those walking across the Monsignor O'Brien Highway but those driving on it as well.

The design of the new station is also a concern. The preliminary design shown to residents at a recent meeting was not well received. The new Lechmere Station appears to be the only station on the Green Line Extension Project where patrons will be asked to purchase Charlie Cards outside in the elements as all the other stations appear to have their Charlie Card stations within the station interior safely out of the elements. (This has caused many to question the treatment of East Cambridge vis-à-vis the rest of the Green Line users.) A large part of this issue seems to come from the lack of a lobby in the current Lechmere Station plans. In addition, the entrance of the new Lechmere Station is not convenient to anyone coming from the East Cambridge neighborhood or the Mall. In fact, the only entrance to the new Lechmere Station appears to be in the most inconvenient location possible for the vast bulk of users coming from East Cambridge and the Galleria Mall. I strongly suggest that there needs to be more than one entrance with easy access for the handicapped.

Finally, after many years of promises of a new Lechmere Station, the MBTA has the opportunity not only to build a station that helps enhance the gateway to East Cambridge but also to provide further benefit to the neighborhood of East Cambridge. This benefit would come in the form of the redevelopment of the historic station buildings currently in use into a covered market and outdoor warm weather market that could benefit the entire neighborhood. A small and dedicated group of residents has been working on plans whereby this goal could be accomplished while maintaining the available development potential in terms of buildable square feet. A lively square/market area will make crossing two busy streets easier for those using public transportation and will add to the value of the area. Make Lechmere a destination not a transition point.

Community Access to Open Space

I-213-014

The design and construction of the project must not reduce the access, both during construction and after completion, of residents and visitors to open and recreational spaces. Nor should the project result in any net loss of open or recreational spaces. In fact, the project should endeavor to create additional open, recreation and public use spaces as part of the mitigation efforts of the plan. The redevelopment of the existing Lechmere Station is one example where the project could either add to the vibrancy of the neighborhood and do a great service in enhancing the fabric of the neighborhood or choose some other use for the parcel that negatively impacts the

describes MassDOT's plans for public outreach in the next phases of the Project.

I-213-012

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-213-013

Please see responses to comments I-212-003 through I-212-005 in the previous letter.

I-213-014

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-213-014

neighborhood. I strongly urge MassDOT to err on the side of enhanced vibrancy and neighborhood fabric whenever possible.

Maintenance Facility Location

I-213-015

YARD 8 MassDOT Preferred Location – MassDOT has continued to propose Yard 8 as their preferred location for the Maintenance Facility. In doing so MassDOT has not only continued to overlook the impacts that the selection of Yard 8 as the site of the Maintenance Facility on the current and future residents of the Brickbottom neighborhood, but has ignored the impact such a location will have on any potential future development in the Inner Belt section of Somerville. In light of the overwhelming negative feedback received from participants in the public process, MassDOT would be seriously negligent should they continue with Yard 8 as their preferred location for the Maintenance Facility.

I-213-016

Boston Engine Terminal Alternative – MassDOT continues to downplay the potential for locating the Maintenance Facility within the existing site occupied by the Boston Engine Terminal (BET). I believe that this site has several key advantages to any of the alternatives proposed by MASS DOT, including Yard 8, Mirror H and Scheme L, and warrants significant additional consideration.

- *Parcel Ownership* – MassDOT has title to the BET site that would reduce the amount of land required to be taken as part of the Maintenance Facility construction.
- *Neighborhood Impact* – BET already is in place and its impacts are known by the neighborhoods and its use would minimize greatly the impacts to these neighborhoods.
- *Operational Simplicity* – At the December meeting in Cambridge it was mentioned that both Yard 8 and Mirror H would require Green Line traffic to be stopped in order for a train to be placed into service. This is because the trains would be required to back onto the track and then reverse direction in order to assume the proper operational positioning. The same goes, only in reverse, for taking a train out of service. Having to stop traffic to either take a train out of service or put one into service does not make operational sense. Utilizing BET would provide MassDOT with the ability to rectify this operational nightmare.
- *Environmental Justice / Equality* – One of the reasons given for needing the Maintenance Facility is to have operational and service capabilities nearer the northern components of the Green Line. While this makes sense, it flies in the face of the fact that the BET performs service on diesel engines that service the southern components of the commuter rail network. It flies in the face of environmental justice and equality that MassDOT would site another

I-213-015

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-213-016

As described in Section 3.3.2 of the DEIR/EA, the Boston Engine Terminal facility is barely adequate for current commuter rail needs. Sufficient space is not available to accommodate the Green Line Extension train storage and maintenance needs. Further, the FTA regulations state that use of both commuter rail and light rail within the same facility is incompatible. However, MassDOT will continue to coordinate with the MBTA to explore possibilities for shared facilities between the Green Line Extension storage and maintenance facility and the BET.

I-213-016

service facility in a neighborhood that already houses a maintenance facility used to service diesel engines from the southern part of the network. In the service of justice and equality, I would recommend MassDOT consider locating the service functions for the southern commuter rail diesel engines south of Boston and use the space made available by such a move to locate the Maintenance Facility for the Green Line within the existing BET footprint.

There has been a lot of good work that has gone into the project to get it to where it is today. There is much more work to be done to bring the project to the next level and ultimately deliver a solution that has far more impact than solely an extension of the Green Line to Medford. This project, done right, has the opportunity to help transform significant parts of Cambridge, Somerville and Medford for the better. You have many willing members of the community working with you to help make this happen. Please do not lose this opportunity.

Thank you for your consideration.

Charles J. Marquardt

Peter Marquez
1 Fitchburg Street
Suite B151
Somerville, MA 02143

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Ian Bowles,

As a citizen of the Commonwealth, an active member of the Somerville community, and as an entrepreneur and business professional who lives in and runs businesses in Somerville, I am writing you this letter in regard to Draft Environmental Impact Report. (Project Number EEA#13886)

As such, there are several very important issues that were not fully explored or committed to in the Green Line Extension DEIR process. In this letter I will address one of those issues: **The need to review options for Composite Mitigation along the Green Line Extension.**

Based on the points and questions outlined and raised below I believe it is incumbent upon on the Secretary to:

I-214-001

- Require the final Environment Impact Study or a supplementary EIR to include a full review of composite mitigation options applied to all factors contributing to the amount of noise, vibration and diminished air quality along both spurs of the Green Line Extension. These options should especially review:

I-214-002

1. Modifications to the tracks:
   Proposed Green Line tracks as well as existing commuter, freight tracks and the Boston Engine Maintenance spur that ends along side the Brickbottom Building

I-214-003

2. Modifications to the train vehicles:
   Proposed Green Line vehicles as well as vehicles using existing commuter, freight tracks and the Boston Engine Maintenance spur that ends along side the Brickbottom Building

I-214-004

3. Modifications to the usage models and scheduling:
   Proposed Green Line maintenance, storage facilities and their scheduling as well as the usage of existing commuter, freight and Boston Engine Maintenance spur lines that ends along side the Brickbottom Building

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I-214-001

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-214-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. The mitigation measures required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments. These findings take into account modifications to all railroad tracks in the Project Area.

I-214-003

Operations of all proposed and existing vehicles that operate in the Project Area have been included in the evaluation and identification of mitigation measures are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-214-004

Please see response to Comment I-214-003.

Current Status

I-214-005

The current DEIR, in addition to not conducting complete sound and vibration measurements on the Union Square Line, the mitigation options outlined in the DEIR fell short of being adequate. They failed to consider that mitigation options that made changes to existing contributing factors: Commuter rail, freight and AMTRAK as well as the Green Line itself and physical changes to the surrounding buildings.

Vibration, sound and air quality is additive. By making changes to the existing commuter, freight and Boston Engine Maintenance rail head lines, that ends along Southside of the Brickbottom Building, as well as to the Green Line will help mitigate the combined factors that put some areas, such as the Brickbottom and Glass Factory buildings at environmental risk.

Needed Mitigation: Tracks

I-214-006

- Track Placement: Many Somerville and Medford residents will co-exist with existing commuter rail lines and the new Green Line tracks just 19 -- 25 feet away. This proximity needs to be investigated to see if it is necessary in every case and to more thoroughly identify possible remediations.

I-214-007

- The Boston Engine terminal uses the dead-end spur to pull cars out of their facility and to idle engines at the end of the rail head next to the Brickbottom Building. These tracks and their use should be investigated. It would be possible to move this track and its function so that the Green Line has more space and does not have to take land along side Brickbottom, so that the Green Line would not be 12 feet away from at least 10 residences.

I-214-008

- Track Noise: Design of Green Line tracks, bridges and existing commuter tracks for low-noise and anti-vibration -- also addressing wheel and rail roughness

Needed Mitigation: Vehicles

I-214-009

- Vehicle Noise: One of the greatest sources noise in the system is the air conditioning of the light rail cars. We request that fan-quieting mitigation be implemented on cars stored and used on the Green Line Extension. This can be accomplished by installation of quiet, efficient fans, several new designs are available. Placement of fans on the vehicle can make a significant difference in the noise radiated toward residents closest to the tracks, especially on the Union Square spur.

- Vehicle Noise: Additionally, Green Line railcars should be fitted with acoustical absorption under the cars. This has been demonstrated to provide up to 5 decibels of mitigation for wheel/rail noise. Similarly, vehicle skirts over the wheels can provide 5 decibels of mitigation. By carrying their own noise barriers, vehicles with these features can provide cost-effective noise reduction.

Needed Mitigation: Usage models and scheduling

I-214-010

- Usage Models and Scheduling: The dead-end rail spur along side the Fitchburg commuter rail as currently used by the Boston Engine facility contributes tremendously to existing noise, vibration and air quality issues along South side of the Brickbottom building.

2

I-214-005

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-214-006

The precise alignment for the tracks near the Brickbottom Artists Building will be determined during preliminary engineering and final design. The tracks will be located as far from the building as possible. The minimum clearance will probably be about 15 feet. MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in DEIR/EA Chapter 6, Draft Section 61 Findings and Mitigation Measures. The mitigation measures required by the Secretary's Certificate on the DEIR are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-214-007

Major changes to operations of the Boston Engine Terminal (BET), MBTA Commuter Rail and other railroads, and railroad vehicles are beyond the scope of the Green Line Extension Project. The BET "Drill Track," or the track used to access the BET from the west, will be relocated approximately five feet further from the Brickbottom Artists Building as part of the Green Line Extension Project.

I-214-008

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has

I-214-011 The Green Line will contribute and increase the existing amount of noise and vibration along the Green Line corridor. Since no measurements were taken on the South-side of the Brickbottom building, the DEIR does not take current or additional noise, vibration and air quality issues into account. Changes in usage patterns and creative changes to the how these lines are used will have a huge impact on the nearby environment. This needs to be fully investigated.

I-214-012 ***Personal Note:*** *I have included pictures taken within a 24 hour period from my living room showing the commuter rail trains idling along side the Brickbottom building. Video is available if you want to hear and feel the impact these trains have every hour on the hour around 10 times a day, 6 days a week mornings, afternoons and regularly between 10PM and Midnight.*

Questions and Requests

Based on the information above, I would ask that the Secretary:

I-214-013 - Commit to do a supplemental Environment Impact Review that fully explores mitigation alternatives across all contributors to noise, vibration and air quality along the Green Line corridor.

I-214-014 - Commit to the establishment of a citizen advisory committee (CAC) to oversee the project and to ensure that mitigation is researched and fully implemented in every awarded contract as well as to provide residents with a process for remediation and, when necessary, arbitration.

I support the Green Line Extension and the benefits that it will deliver, however on its current path the project has not done enough to ensure that the fully range of possible mitigation options have been explored. As outlined in the DEIR, the Green Line Extension places an unjust burden on the residents of Brickbottom and all citizens and business that live and work along the corridor.

I appreciate your continued thoughtful consideration and commitment to environmental justice.

Sincerely,

Peter Marquez
Somerville resident
President 8020 Networks

1 Fitchburg St
Suite B151
Somerville, MA 02143
617 628 7112

3

complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

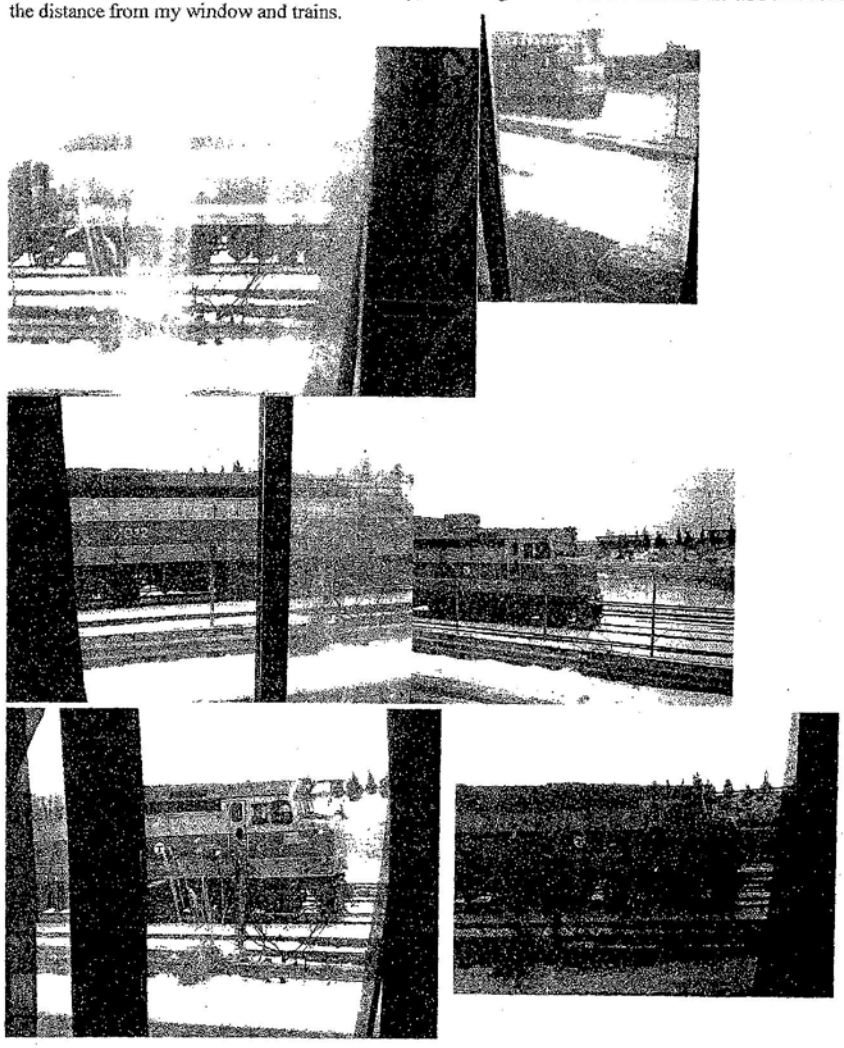
I-214-009

While noise from fans in auxiliary equipment such as air-conditioners on transit cars is a significant noise source for stationary trains, the greatest source of noise on moving trains is generated at the wheel-rail interface. Installing quieter fans could be effective in reducing noise emissions from Green Line cars while stationary, such as when they are in the maintenance yard being prepared for revenue service. However, this mitigation measure would not be effective in reducing the noise generated by moving Green Line cars or the total noise generated by both Green Line and commuter trains. Noise barriers proposed for the Project would be more effective in reducing the noise from both Green Line and commuter trains.

The potential retrofit of Green Line cars with vehicle skirts including acoustical absorption behind the skirt and underneath the car may reduce noise levels from Green Line cars. However, the project corridor is generally dominated by noise from existing commuter trains and such a mitigation measure would not be effective in reducing the total noise generated by both noise sources. Noise barriers proposed for the Project would be more effective in reducing the noise from both Green Line and commuter trains.

Specific modifications to existing Green Line vehicles would be a systemwide effort and may be beyond the scope of the Project. As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has

24 hours outside of my living room and office. Boston Engine Maintenance engines idling next to my window. The noise, vibration and diesel exhaust created by this practice and the use of the closest line by Pan Am for freight creates an elevated baseline that the Green Line will contribute to. This needs to be measured and taken into account. Additionally, the taking of land for the Green Line will cut in half the distance from my window and trains.



complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes proposed mitigation measures and next steps pertaining to mitigation.

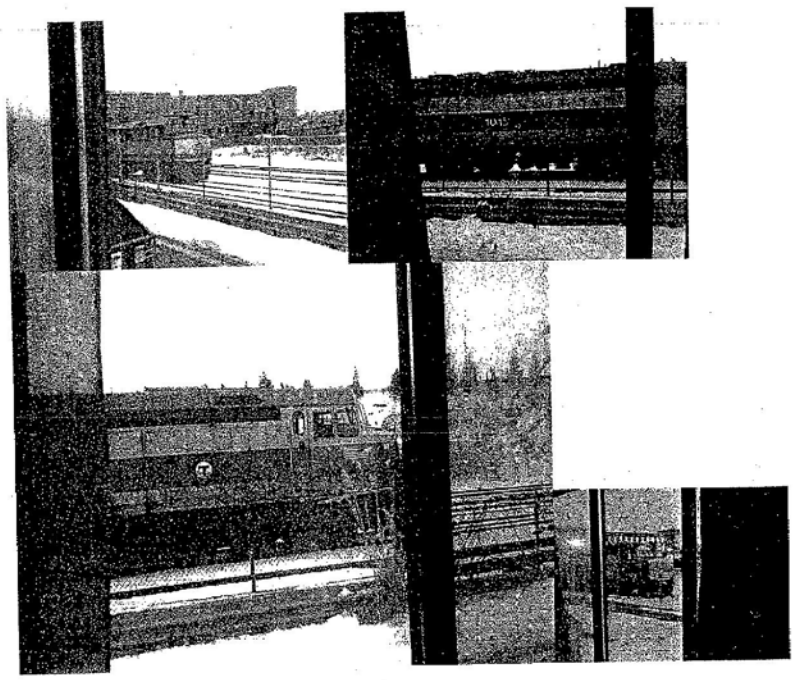
I-214-010

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-214-011

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling





assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

I-214-012

MassDOT has noted and considered your comment.

I-214-013

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-214-014

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Peter Marquez
1 Fitchburg Street
Suite B151
Somerville, MA 02143

RECEIVED
JAN 8 2010
MEPA

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing you this letter in regard to the Draft Environmental Impact Report (project Number EEA#13886) as a citizen of the Commonwealth, an active member of the Somerville community, and as an entrepreneur and business professional who lives in and runs my businesses from the Brickbottom Building in Somerville.

As a 24-hour resident of the Brickbottom Building, the additive environmental impact of the Green Line extension is extremely important to my business, my family's quality of live and health.

As such, there are several very important issues that were not fully explored -- and in some cases completely omitted -- during the Green Line Extension DEIR process. In this letter I will address one of those issues: **The need for a full and complete Environmental Impact Study.**

Based on the points and questions outlined and raised below,I believe it is incumbent upon on the Secretary to:

I-214-015

- Require a full Environment Impact Study on all aspects of the Green Line Extension that impact the Brickbottom/Inner Belt area, especially
  1. The Union Square Line on the South side of the Brickbottom building which was not fully studied in the DEIR and
  2. All possible impacts derived from the proposed maintenance and storage facilities

Current Status

As outlined in the current DEIR, sound and vibration measurements are required to establish the additive impact of the new lines. With the introduction of the Green Line Extension, residents of the Brickbottom Artists Building will live with two Green Line spurs on either side of the building. Full investigations need to be done on both lines and sides of the building to fully understand their impact.

I-214-016

However, the south side of Brickbottom was not fully studied. Noise and vibration measurements were only taken on the north side of the Brickbottom Artists Building. The south side of the building – which is currently severely impacted by the existing Fitchburg commuter line, Boston Engine terminal rail head, used hourly by Amtrak, MDOT and Pan Am

I-214-015

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-214-016

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading.

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

I-214-016 – has not been given adequate study to establish a baseline for current noise, vibration and air quality, nor to fully establish possible mitigation strategies.

I-214-017 Additionally, sound and vibration measurements need to take into account the impact of hourly use of the Boston Engine terminal rail head 6 days a week from 9 am to 11 PM where large diesel engines used to drag trains from the facility idle next to the Brickbottom building.

Personal Note: *Whether I am on the phone, in a business meeting or in my bed, the noise and vibration of the current commuter rail and (even more powerful) the regular idling of trains on the Boston Engine Spur 25 feet from my window disrupt and disturbs normal life.*

Additional Study Outcomes

I-214-018 A full and complete environment baseline must be established, to which anticipated Green Line impacts can be added. The current DEIR does not do enough document these factors. Additionally study will allow the Secretary to:

- Establish the current and anticipated levels of Environment Injustice on the residents of Brickbottom and others along the Fitchburg line / Union Square Green Line Spur
- Determine what Green Line mitigation is appropriate to remediate the level of injustice based on anticipated sound and vibration impacts
- Outline what mitigation can be done on the commuter, Grand Junction and Boston Engine Spurs to lower composite impact and levels of environmental injustice based on existing sound, vibration and air quality
- Determine the impact mitigation, such as air-tight noise-reduction windows in old industrial building like the Glass factory and Brickbottom, will have on indoor air quality.

Questions and Requests

Based on the need for additional measurements I would ask that the Secretary:

- Commit to a complete Environment Impact Review and not accept the DEIR as a final study.
    - I-214-019 Include in the final Environmental Impact Review a complete study of the Fitchburg Line, Union Square Spur, Boston Engine rail head, Grand Junction, the South-side of the Brickbottom Building for sound, vibration and air quality.
    - I-214-020 Include in the final Environmental Impact Review the impact of the Union Square Line with regard to land taking and proposed track placement for total noise, vibration and air quality impact on the South side of the Brickbottom Building, as this was not done in the DEIR.
    - Include in the final Environmental Impact Study a full exploration of moving the Boston Engine Terminal Rail head to create more room for the Green Line and not have to take land from the Brickbottom Building on the South side of the building.
    - I-214-021 Include in the final Environmental Impact Review a site-specific study to incorporate the benefits of noise barriers that takes into account the combined benefits of sound and air quality that they can provide.

I-214-017

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-214-018

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA. The Secretary's Certificate found that the DEIR/EA adequately documented the environmental baseline and impacts. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-214-019

Potential noise and vibration impacts were assessed for the southwest facade of the Brickbottom Artists Building, which abuts the existing MBTA Fitchburg Commuter Rail line. Because the northeast façade represents the location of the building with a potential for more severe noise impact, findings for the southwest façade were not originally reported in the DEIR/EA. These findings have been included in FEIR Chapter 8. All noise projections take into account proposed changes to the topography of the alignment, including things such as retaining walls and grading. Operations of the Boston Engine Terminal (BET), MBTA

I-214-022
- A study by NOAA and EPA found that sound barriers also reduce the amount of pollutants, such as soot from diesel exhaust that reaches area residents

I-214-023
- Contrary to the DEIR, the Federal government's 2006 Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06) states that sound barriers, despite the height of the building, can still provide meaningful sound absorption. "Where the barrier is very close to the transit vehicle or where the vehicles travel between sets of parallel barriers, barrier effectiveness can be increased by as much as 5 decibels by applying sound-absorbing material to the inner surface of the barrier."

I-214-024
- Include in the final Environmental Impact Review a study of all mitigation options including all of those that can applied to the Green Line, Commuter, Freight, Boston Engine maintenance and Amtrak activity.

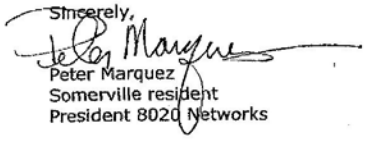
I-214-025
- Include in the final Environmental Impact Review a study of the impact that proposed mitigation will have on indoor air.
  - The sealing of homes along the Green line corridor -- air-tight noise-reduction windows, etc --- will have undetermined impact on health. According to the US EPA most homes have more than one source that contributes to indoor air pollution. There can be a serious risk from the cumulative effects of these sources. Air-tight noise-reduction windows exacerbate these issues.

I-214-026
- Commit to the establishment of a citizen advisory committee (CAC) to oversee the project, to ensure that mitigation is implemented in every awarded contract and to provide residents with a process for remediation and, when necessary, arbitration.

I support the Green Line Extension and the benefits that it will deliver. However, on its current path, the project has not done enough to ensure that an unjust burden is not placed on the residents of Brickbottom and all citizens and business that live and work along the Green Line extension.

I appreciate your continued thoughtful consideration and commitment to environmental justice.

Sincerely,



Peter Marquez
Somerville resident
President 8020 Networks

1 Fitchburg St
Suite B151
Somerville, MA 02143
617 628 7112

Commuter Rail and other railroads, and railroad vehicles are beyond the scope of the Green Line Extension Project.

I-214-020

DEIR/EA Section 5.3 describes the Project's potential temporary and permanent acquisitions. MassDOT will evaluate opportunities to minimize these property impacts.

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

I-214-021

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-214-022

While sound barriers are considered to have minor benefits for air

pollution, new fuel standards from EPA will result in more significant reductions in train, automobile, and bus emissions.

I-214-023

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-214-024

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-214-025

The Green Line Extension will have a positive impact on outdoor air quality within the study area. Indoor air quality is unique to each individual building, and is outside the scope of this project.

I-214-026

In accordance with the Secretary’s Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT’s plans for public outreach in the next phases of the Project.

From: 01/07/2010 22:05 #009 P.015

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-215-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-215-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Lena Matranga
Signature

LENA MATRANGA
Print Name

Unit 508 169 Monsignor O'Brien Hwy
East Cambridge Mass 02141-1
Address

Johnson, Holly (EEA)

From: Chris Matthews [cmatthews@mvvainc.com]
Sent: Tuesday, January 05, 2010 9:55 AM
To: Holly.S.Johnson@state.ma.us
Subject: Lechmere Station Relocation Letter of Comment
Attachments: Green Line Comment.pdf; Jan 10 Lechmere Square.pdf

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

5th January 2010

Dear Secretary Bowles,

As a resident of East Cambridge and the Vice President of the East Cambridge Planning Team, I am writing to express my and my wife's comments and ideas about the planned move of the Lechmere T station across McGrath Highway. As you know the proposed station will be both further away from the East Cambridge neighborhood than it is now, and on the other side of six lanes of traffic, causing us concerns for safety, and accessibility.

I-216-001

We feel that if the new station is planned as an integral part of a revitalized Lechmere Square we can mitigate the safety issues and create a more vibrant, safe, and welcoming gateway to Cambridge and approach to the new station. These ideas are contained in the design proposals for Lechmere Square presented by the East Cambridge Planning Team to your staff, including Mark Boyle, Joe Cosgrove, Kate Fichter, and attached to this letter. We have had nothing but positive feedback from your staff, the City of Cambridge staff and elected officials, neighbors and local business leaders. We urge you to consider these ideas, we believe they represent a way of developing the station and adjacent parcels owned by Mass DOT that will be good for everyone and with the increased development on some parcels should incur no net extra cost.

Sincerely,

Chris and Taco Matthews
26 Sixth Street
Cambridge MA 02141

I-216-001

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

ECPT Lechmere Square Working Group

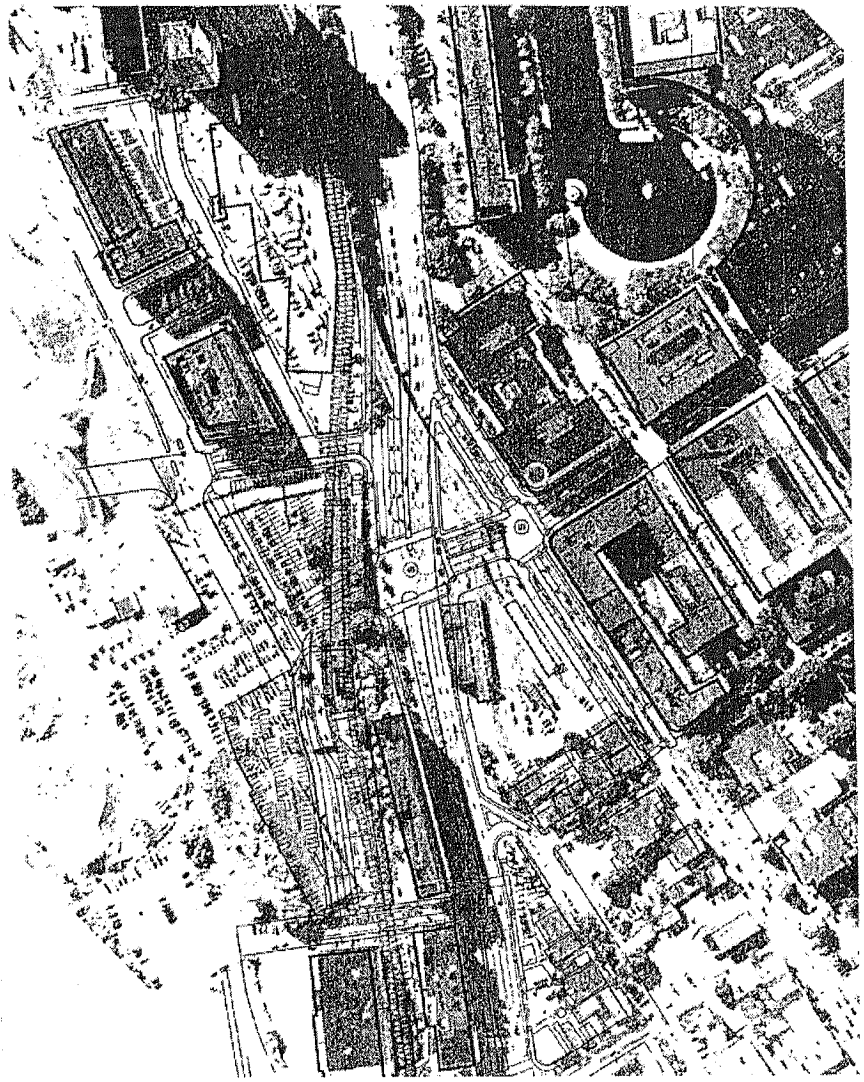


28 October 2009

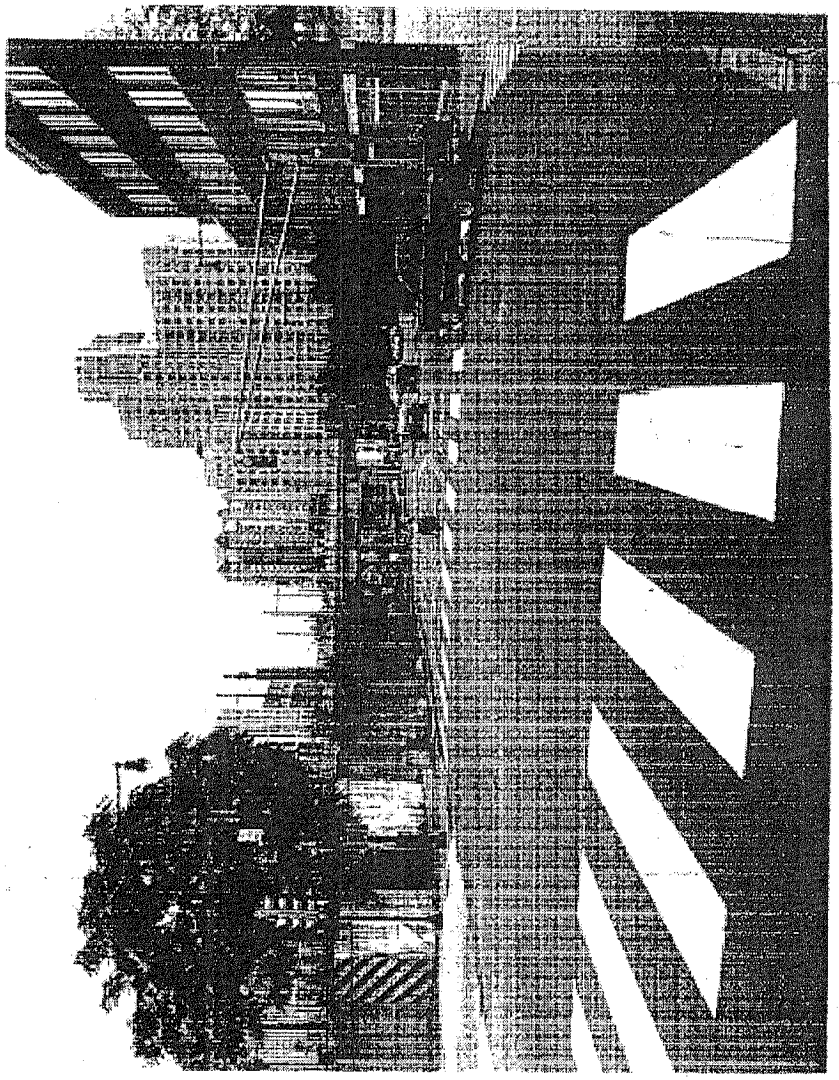
ON LAND llc
ndscape architecture | urban design | garden design
nstructed ecologies

OVERVIEW:

Green Line Extension and Relocation of Lechmere Station.



BORN IN IRELAND. RAISED IN BOSTON.



5 KEY ISSUES at Lechmere Square

1. **Redevelop Lechmere Square As A Major Gateway To East Cambridge And An Integrated Hub Of The Neighborhood.**

2. **Improve Pedestrian Connections and Road Crossings, Especially at Monsignor O'Brien Highway.**

3. **Preserve the Historic Station Buildings and Redevelop Around a New Public Market Square with New Restaurants, Retail and a Hotel.**

4. **Improve Station Entrances and Lobby.**

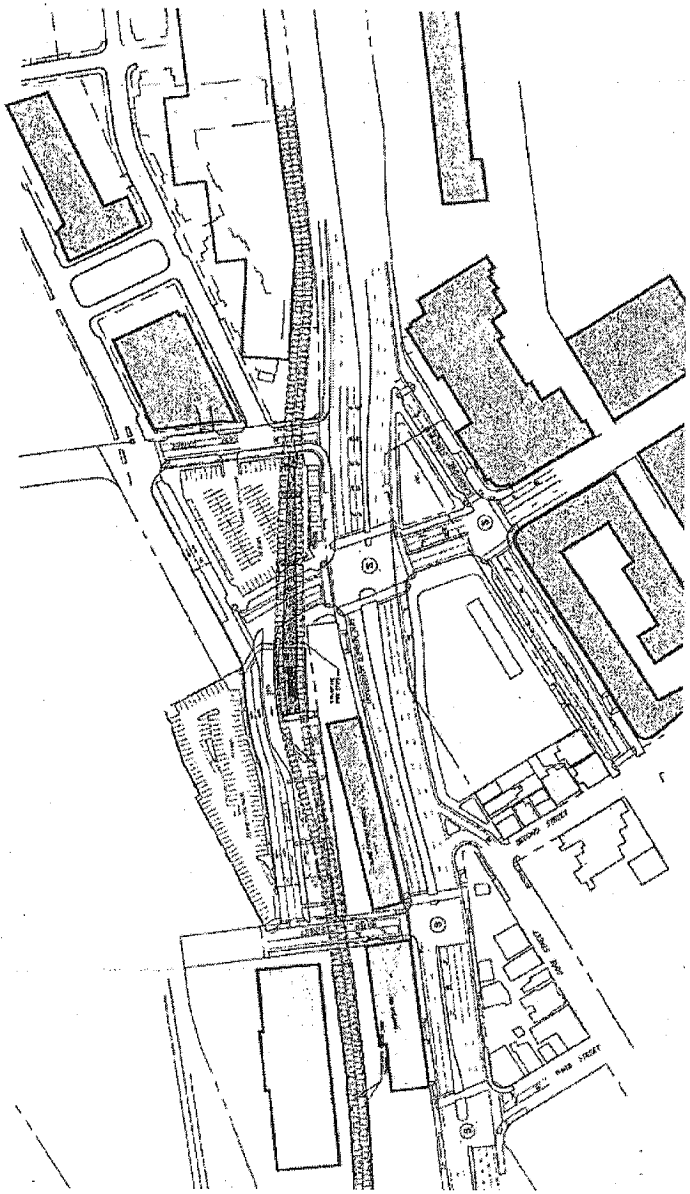
5. **Integrate the Green Line and Bus Station Design with the Future North Point Street Grid.**

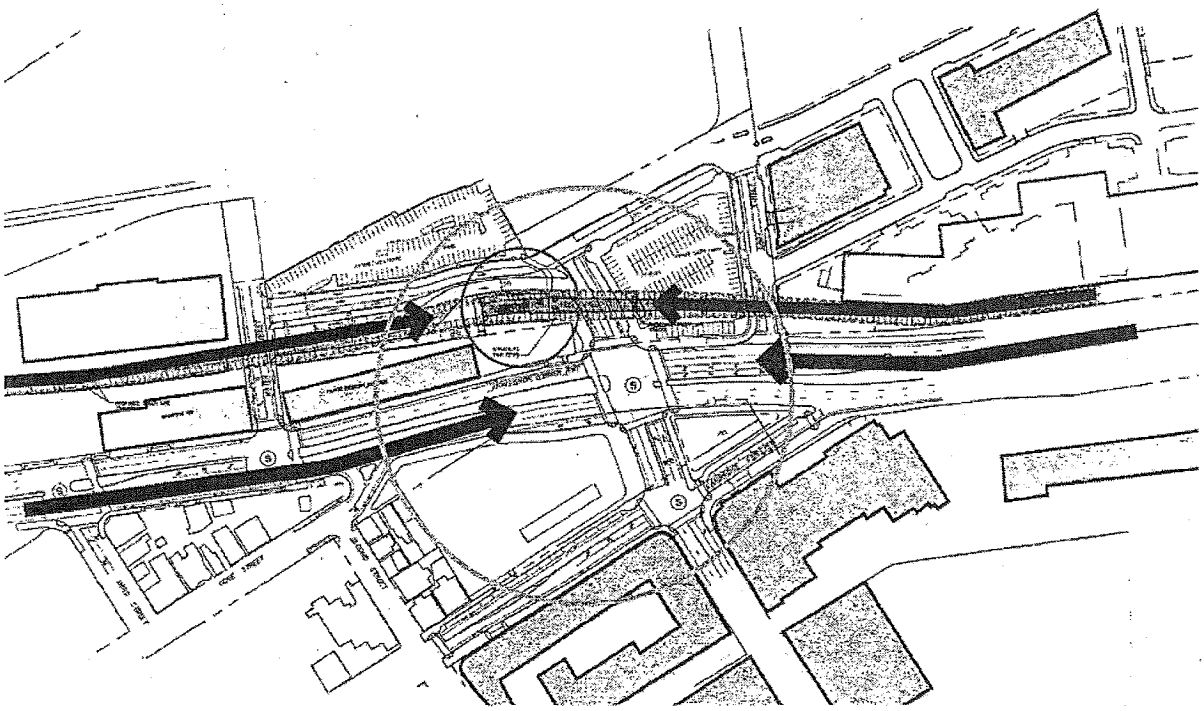
First, Lechmere Square...

1. **Redevelop Lechmere Square As A Major Gateway To East Cambridge And An Integrated Hub Of The Neighborhood.**

2. **Improve Pedestrian Connections and Road Crossings, Especially at Monsignor O'Brien Highway.**

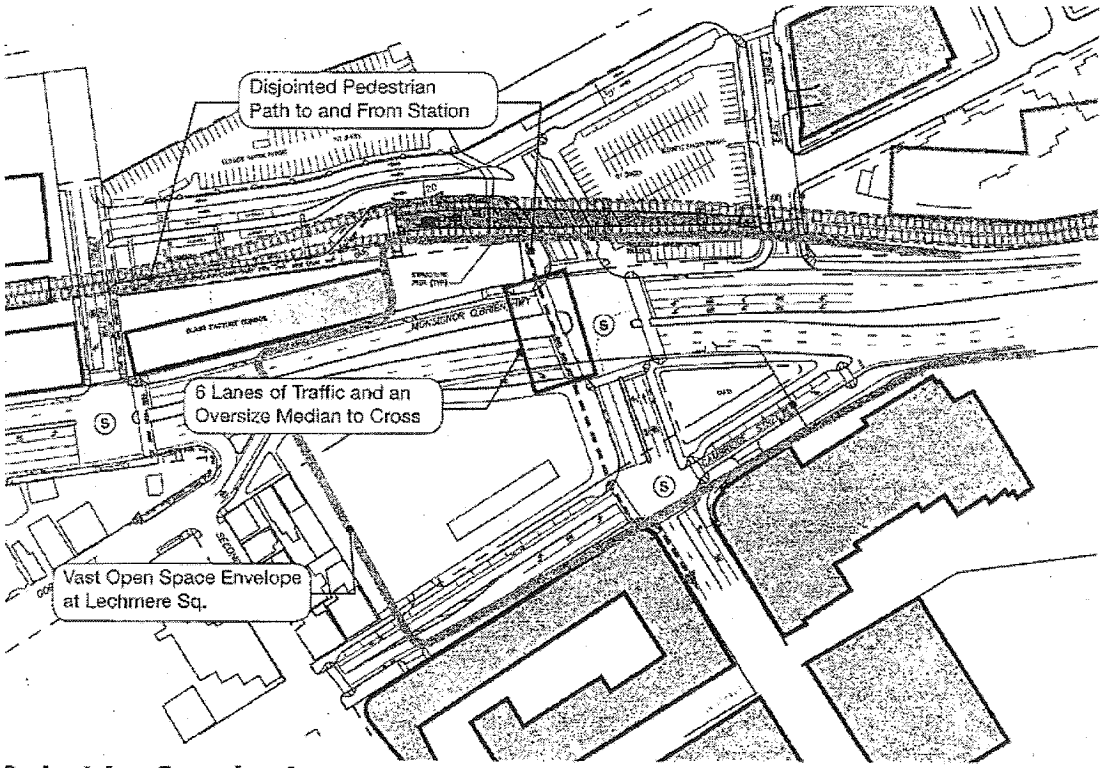
3. **Preserve the Historic Station Buildings and Redevelop Around a New Public Market Square with New Restaurants, Retail and a Hotel.**



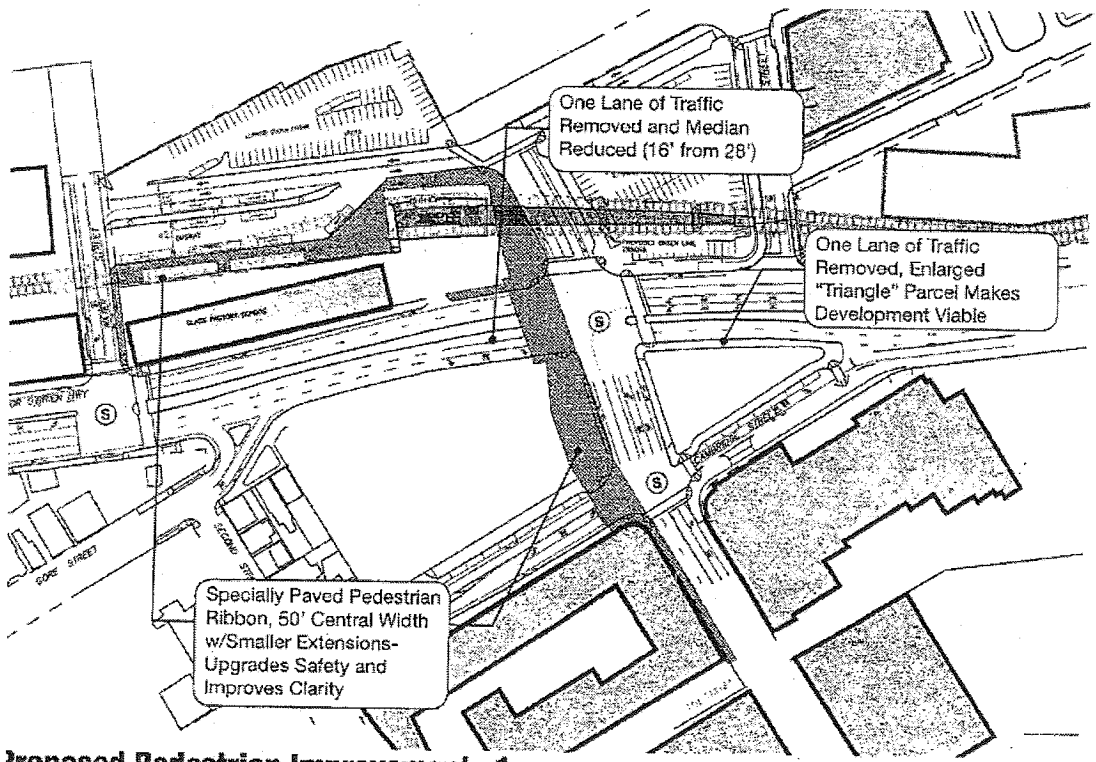


echmere Square as a Gateway to East Cambridge

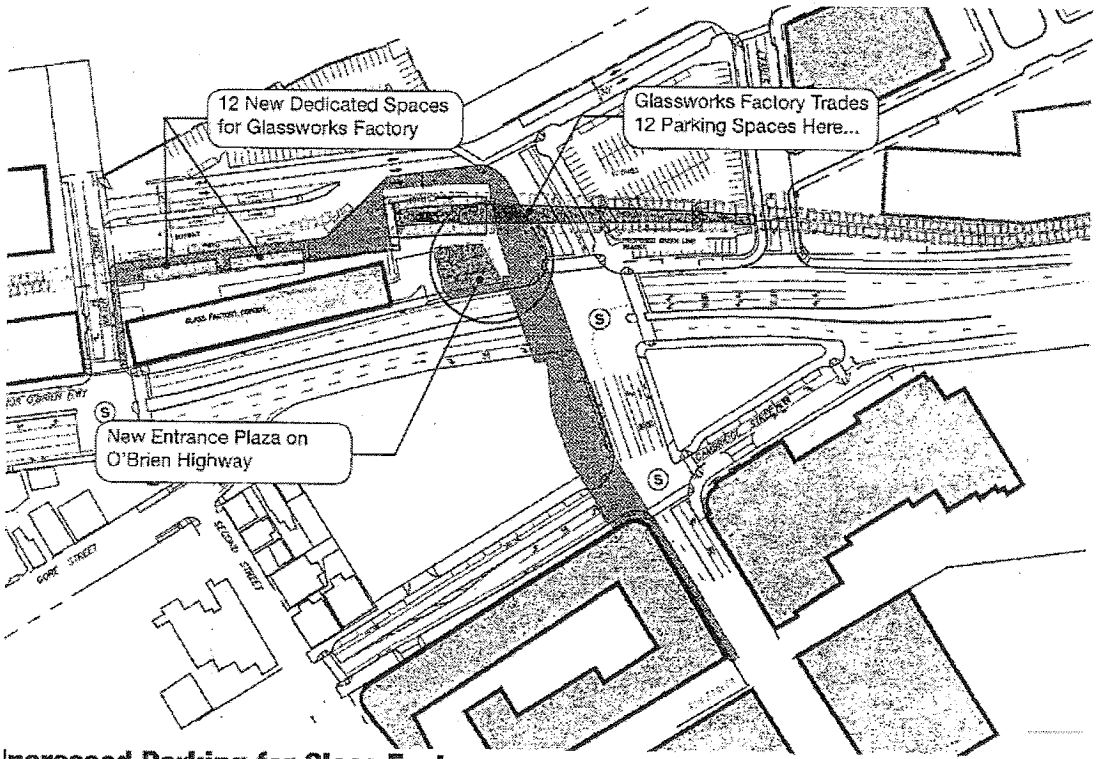
echmere Square as a Hub



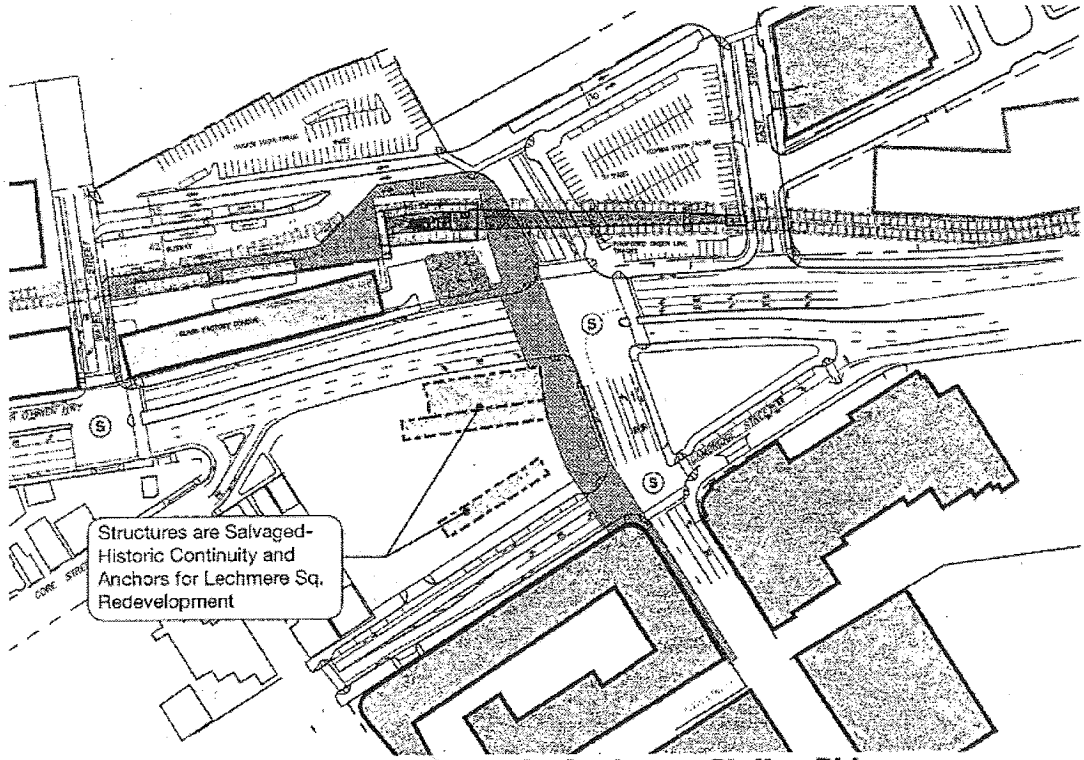
Pedestrian Crossing Issues



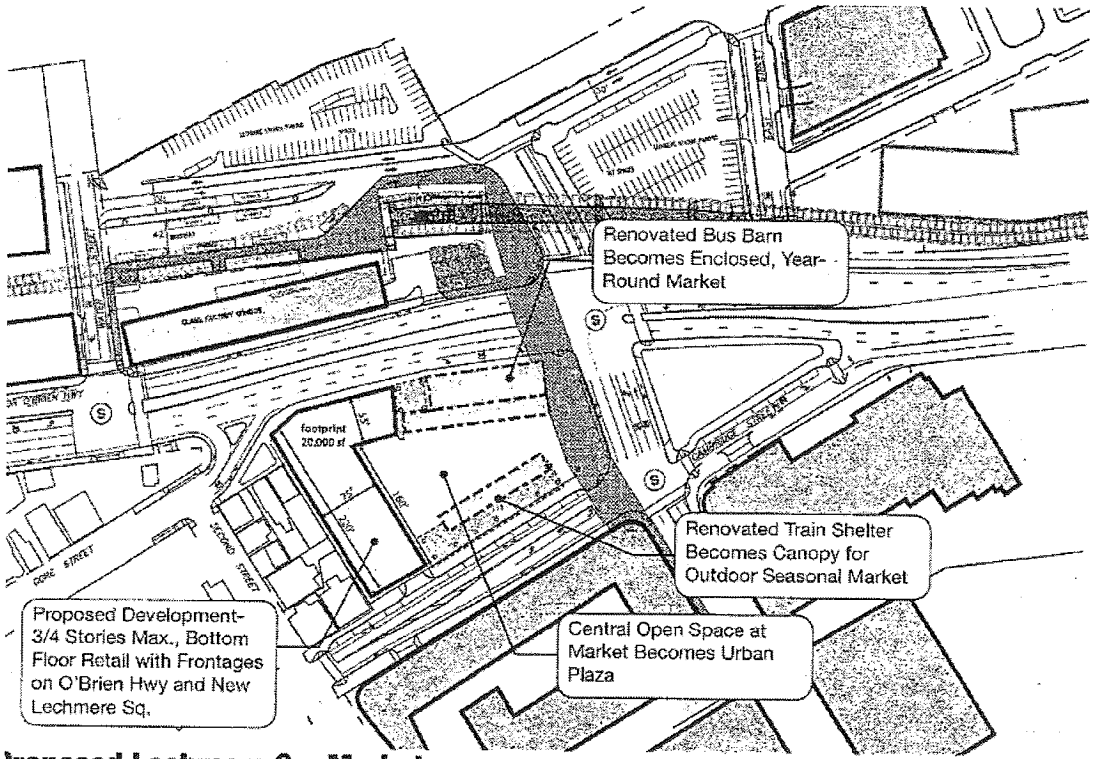
Proposed Pedestrian Improvements 1



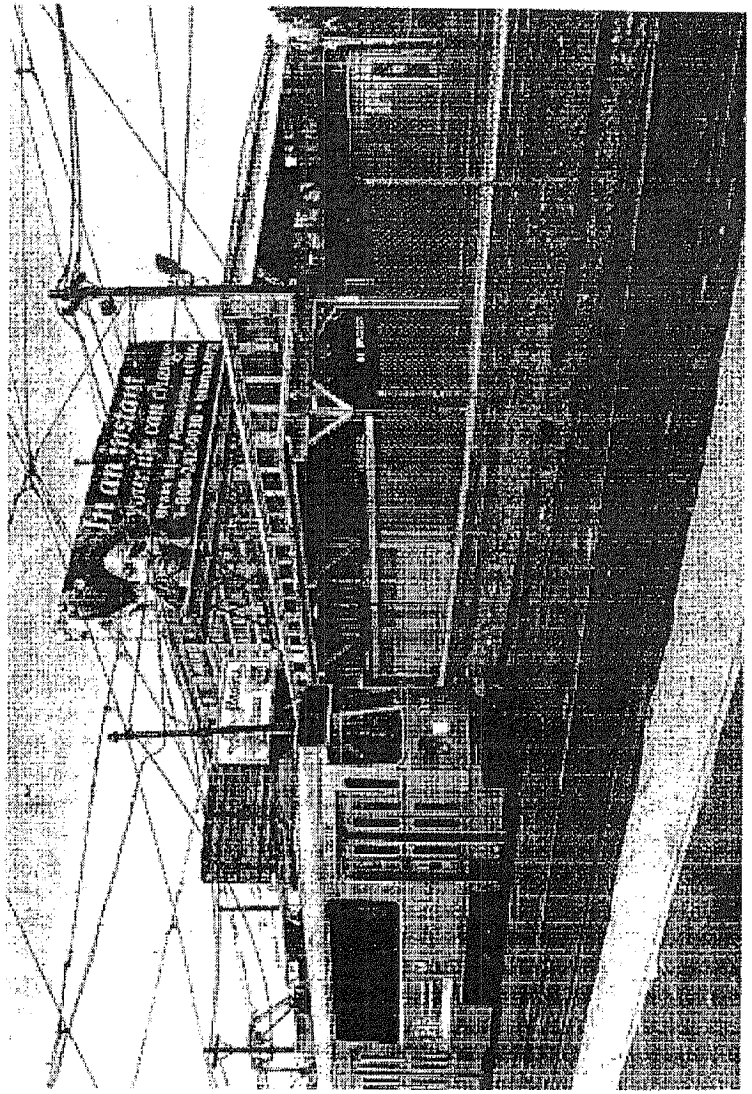
Increased Parking for Glass Factory

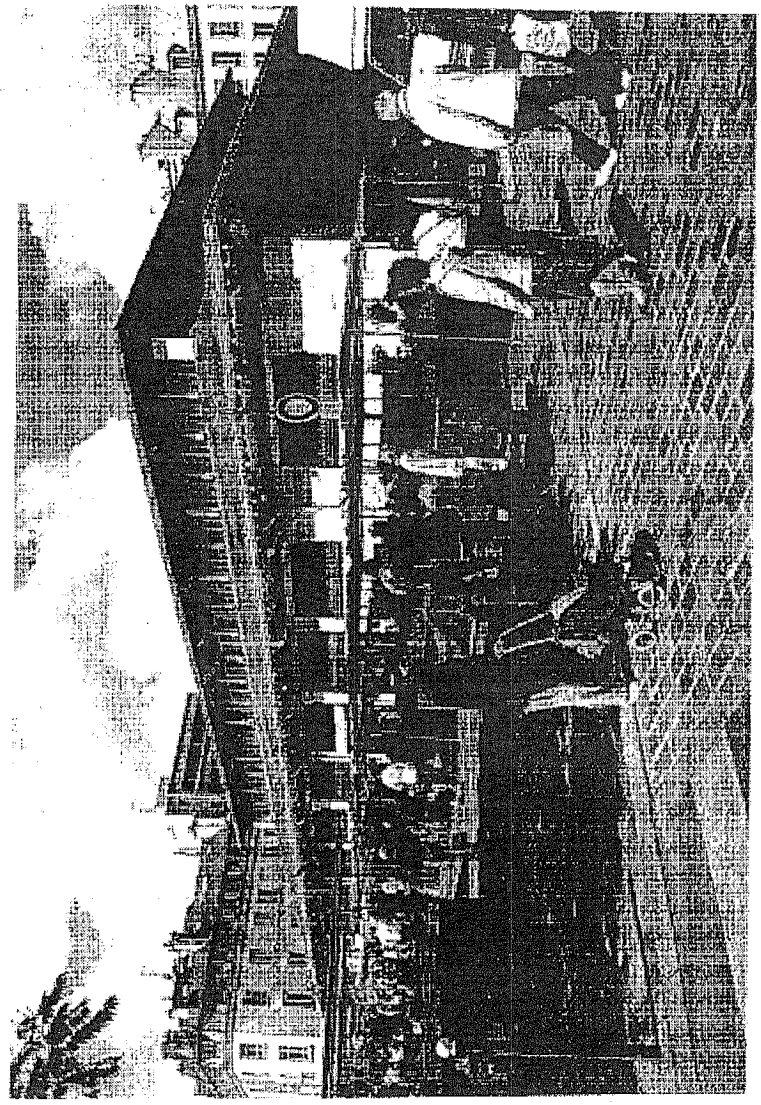


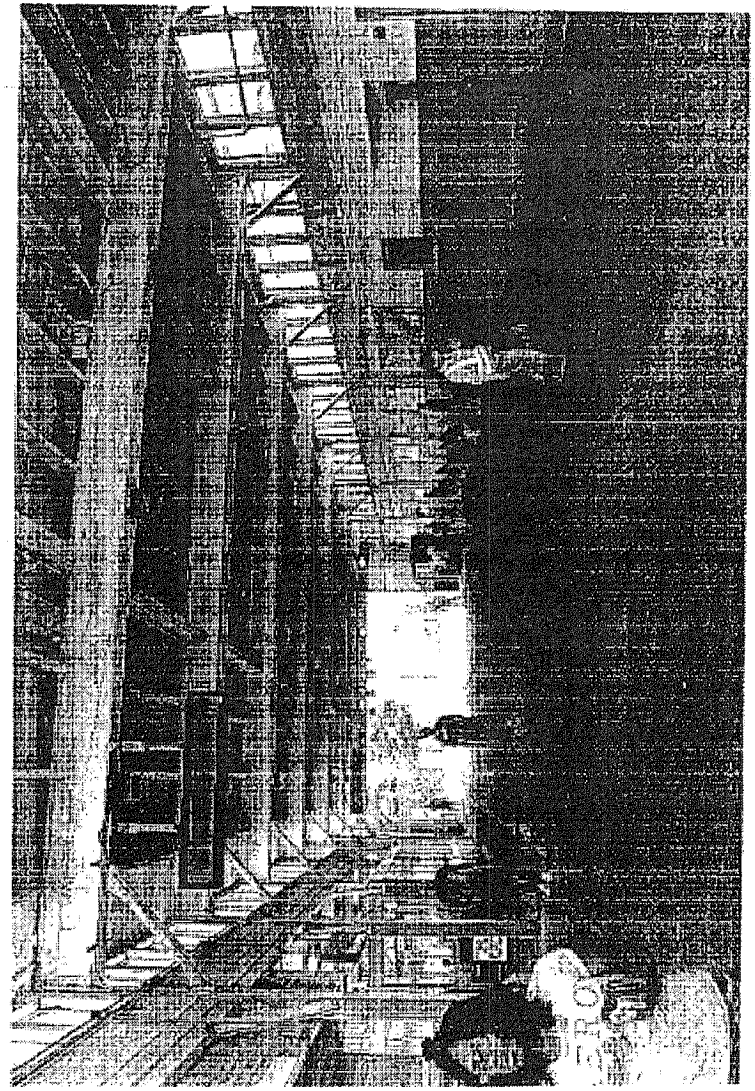
Historic Preservation/Adaptive Reuse for Lechmere Station Bldgs.

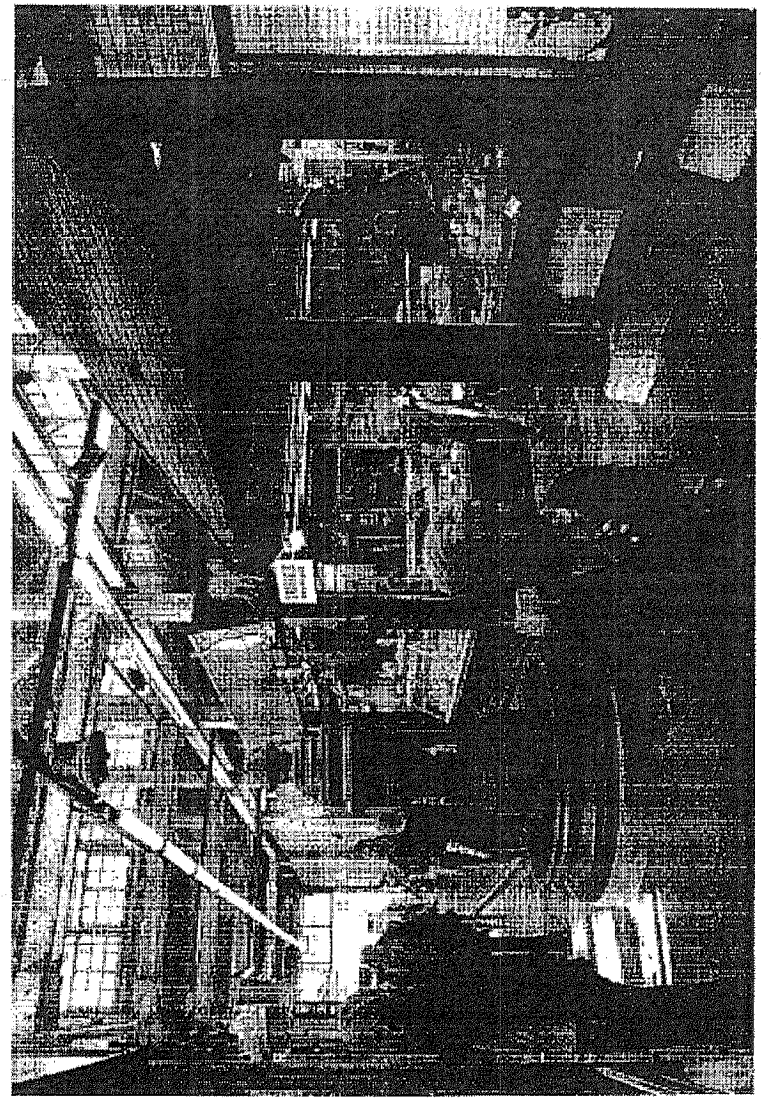


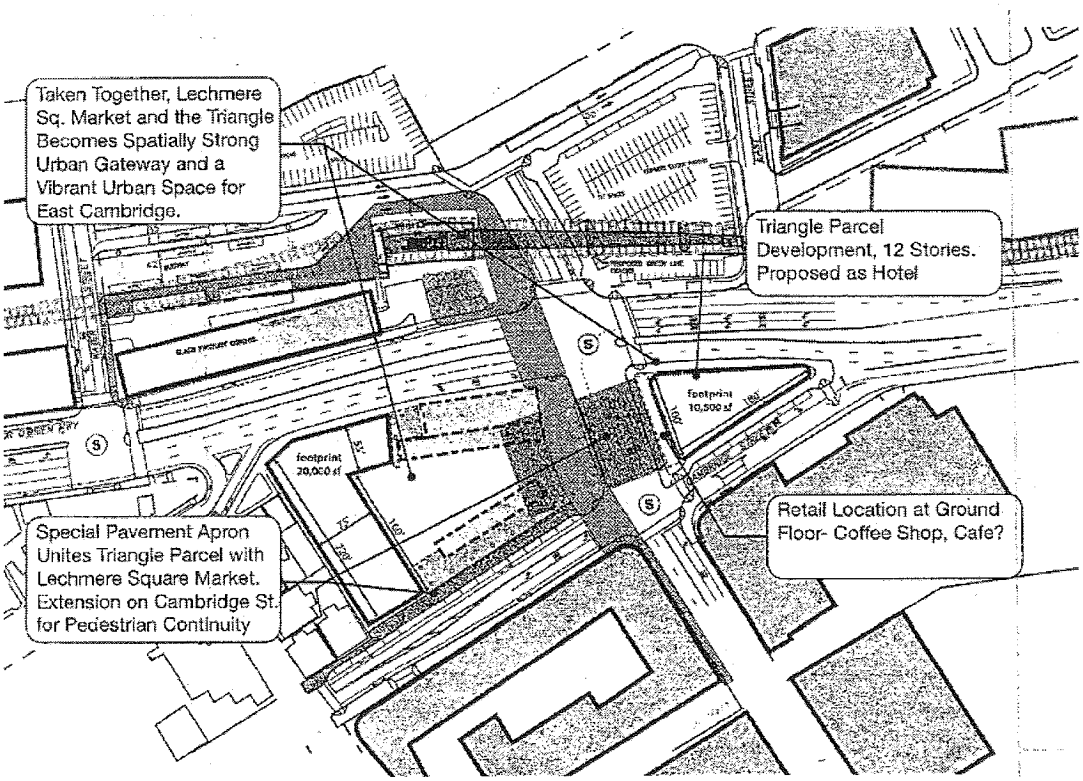
Proposed Lechmere Sq. Market



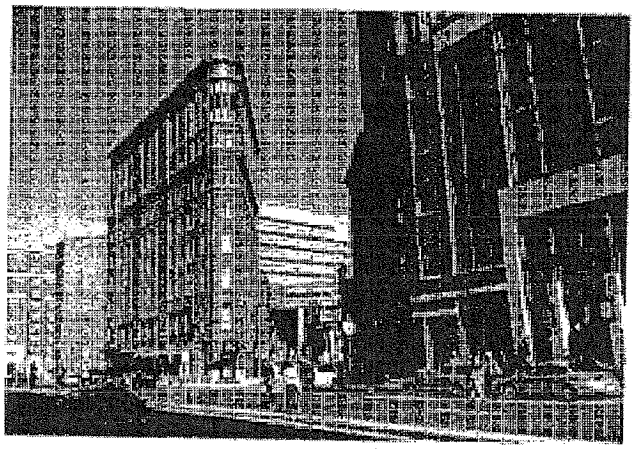




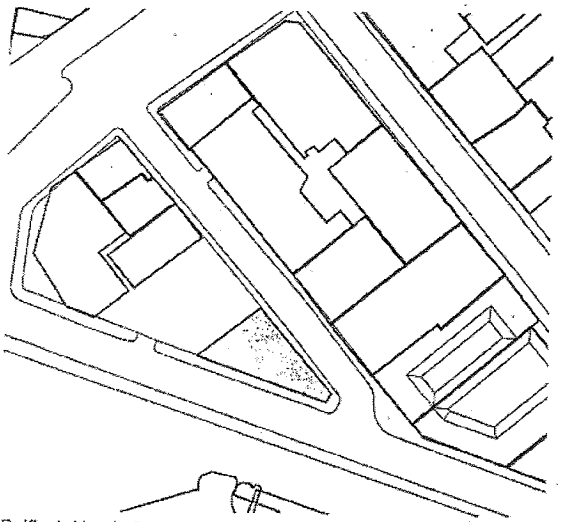




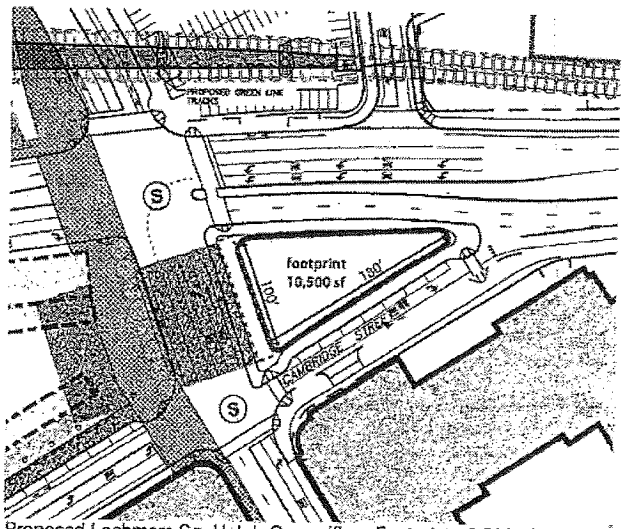
Proposed Triangle Parcel Development



Flatiron Hotel Precedent- Bulfinch Hotel, Bulfinch Triangle, Boston



Bulfinch Hotel- Groundfloor Footprint 3500 sf
9 Stories = 31,500 sf



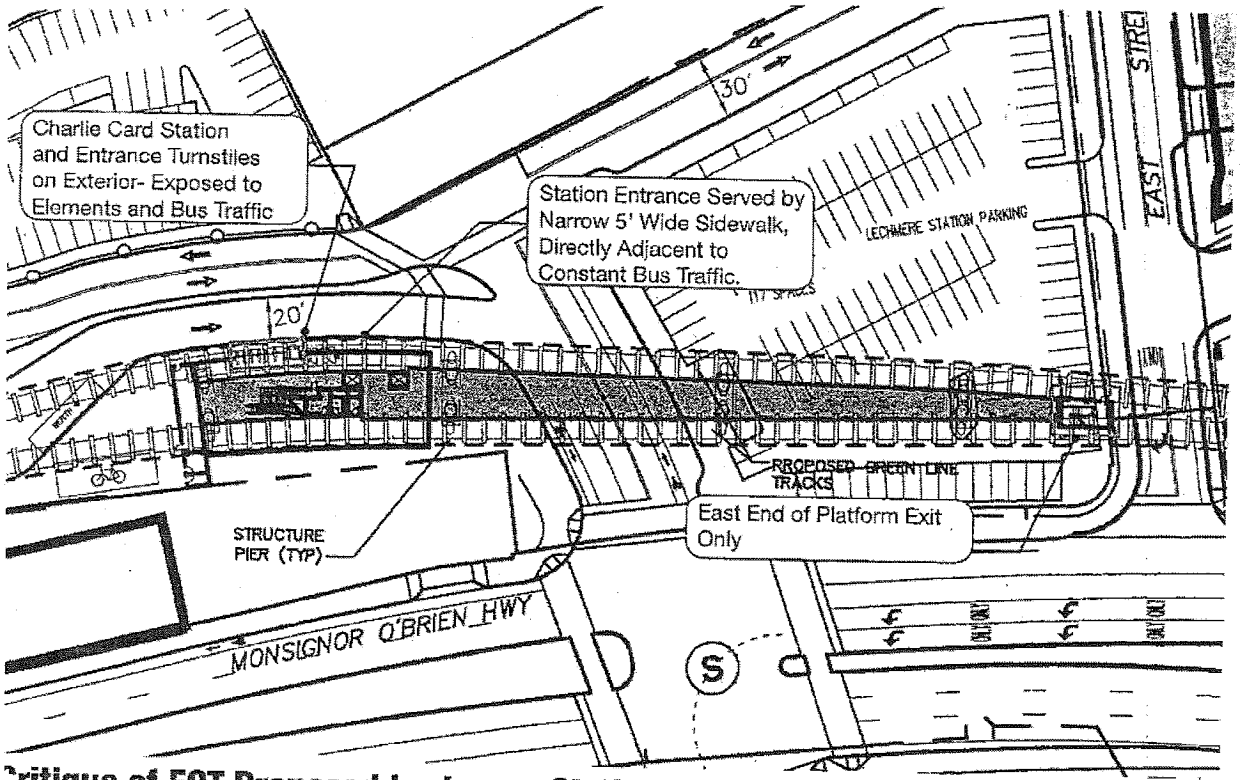
Proposed Lechmere Sq. Hotel- Groundfloor Footprint 10,500 sf

Scale Comparison- Bulfinch Hotel to Proposed Lechmere Square Hotel

Then, New Lechmere Station

4. **Improve Station Entrances and Lobby.**

5. **Integrate the Green Line and Bus Station Design with the Future North Point Street Grid.**

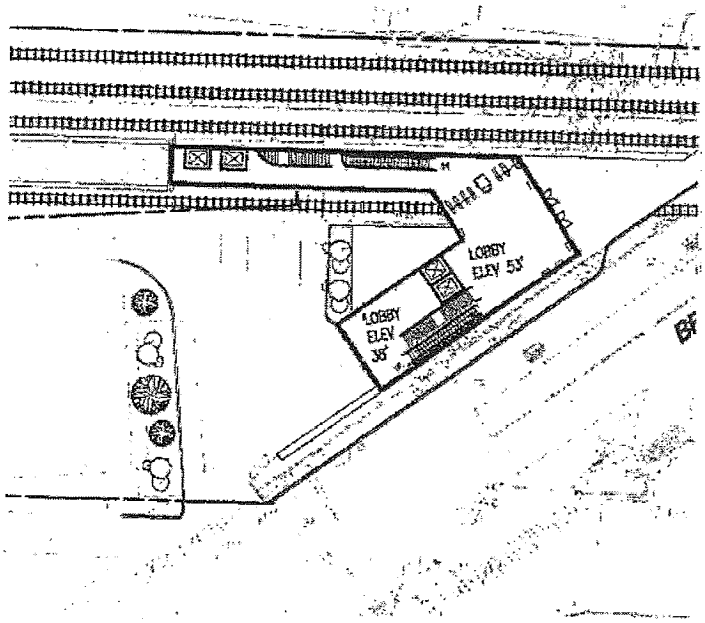


Critique of EOT Proposed Lechmere Station

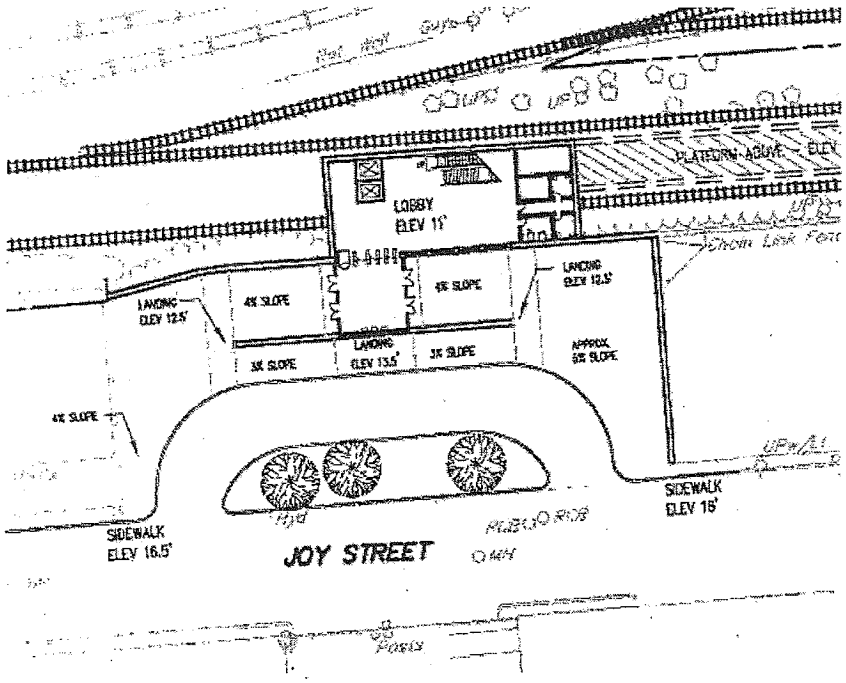
Proposed Lechmere Station has No Lobby- Charlie Card Services and Turnstiles Exposed to Elements. All of the Other Proposed Stations on the Green Line Extension have Lobbies and Therefore Interior Turnstiles and Charlie Card Stations.

Why is Lechmere Station Different?

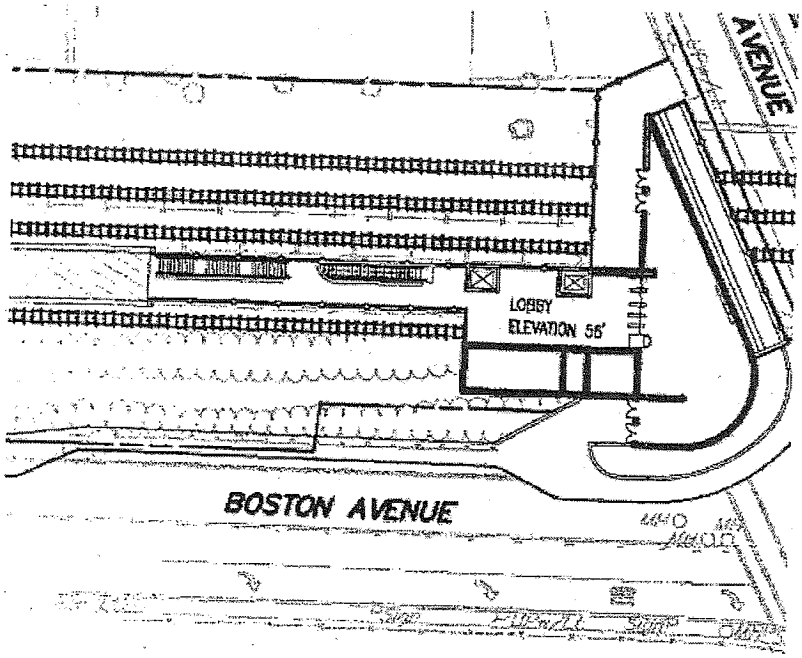
Ball Square



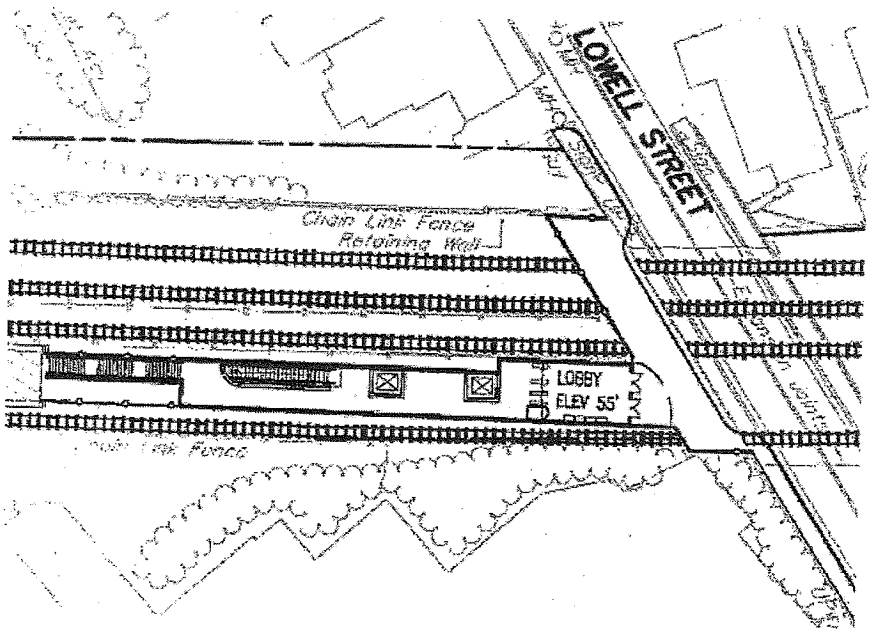
Brick Bottom



College Avenue

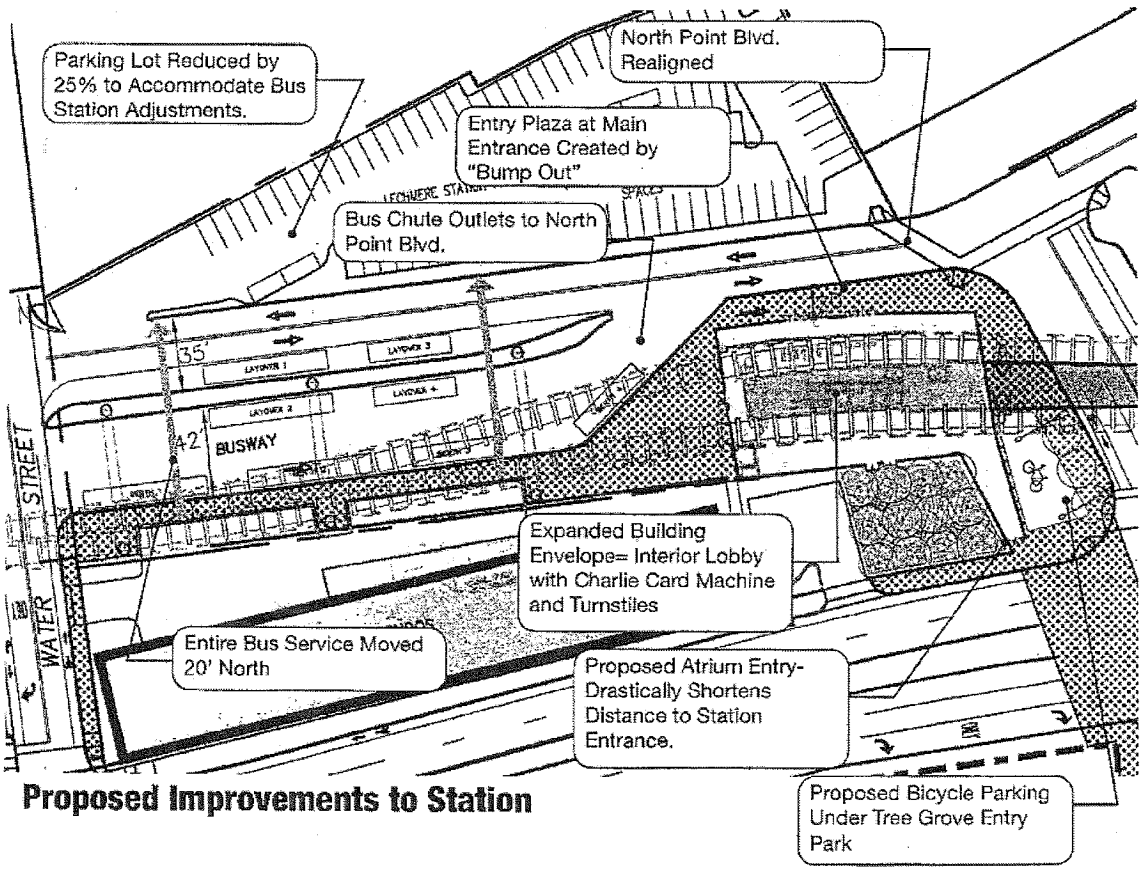


Lowell Street



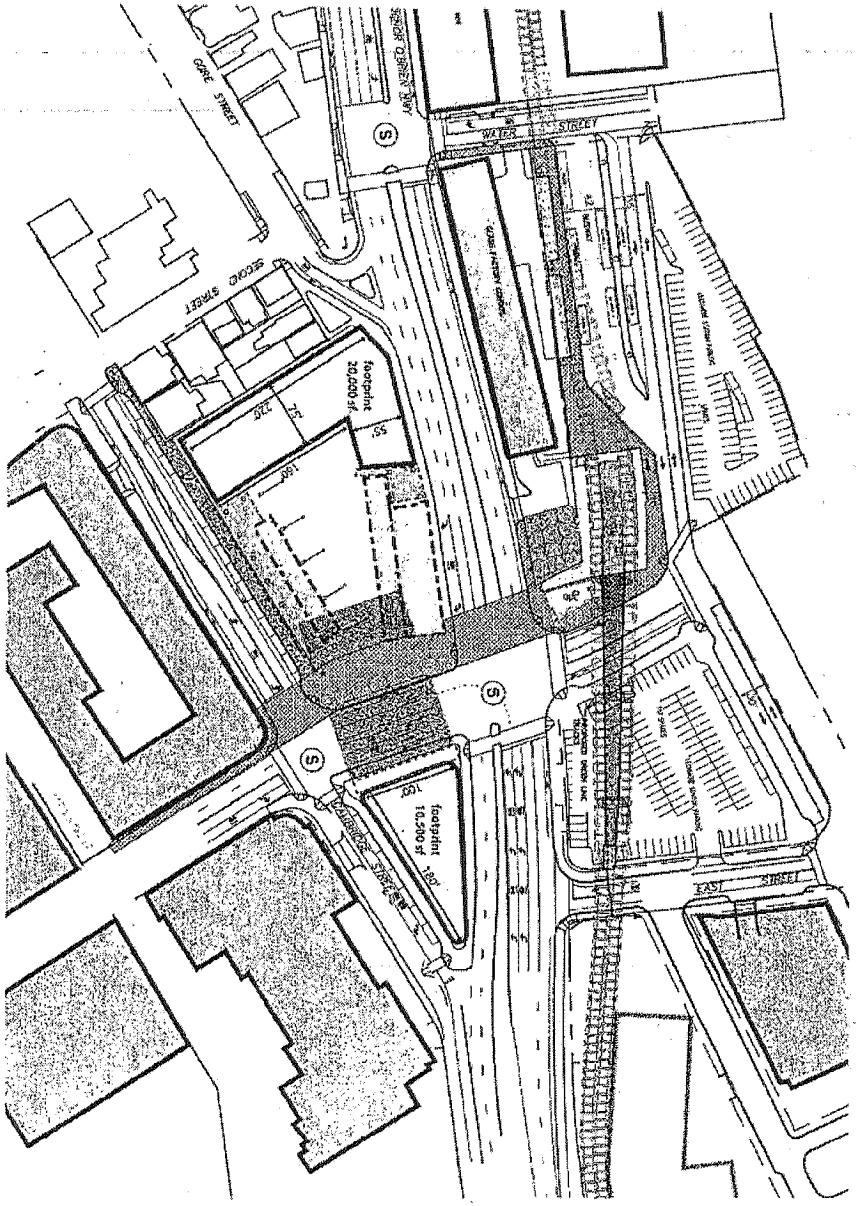
Mystic Valley Parkway

Critique of EOT Proposed Lechmere Station



Proposed Improvements to Station

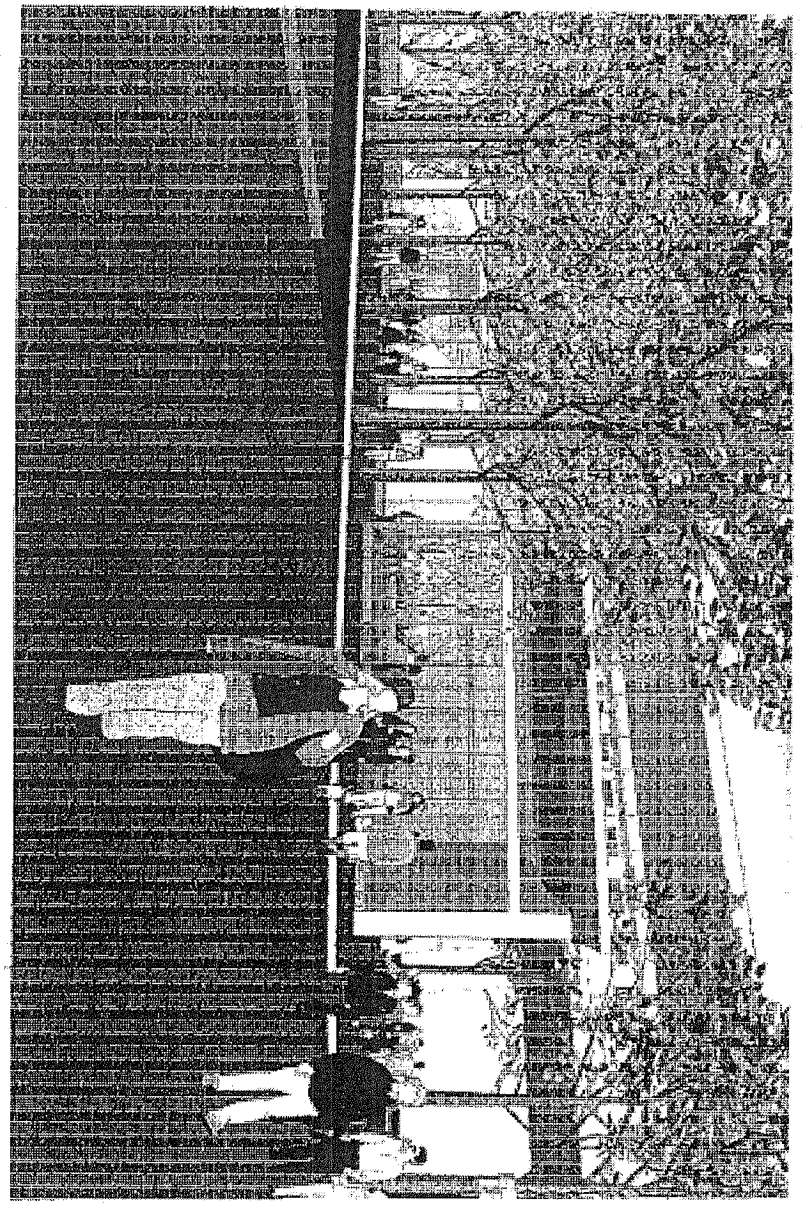
Proposed New Entrances to Station

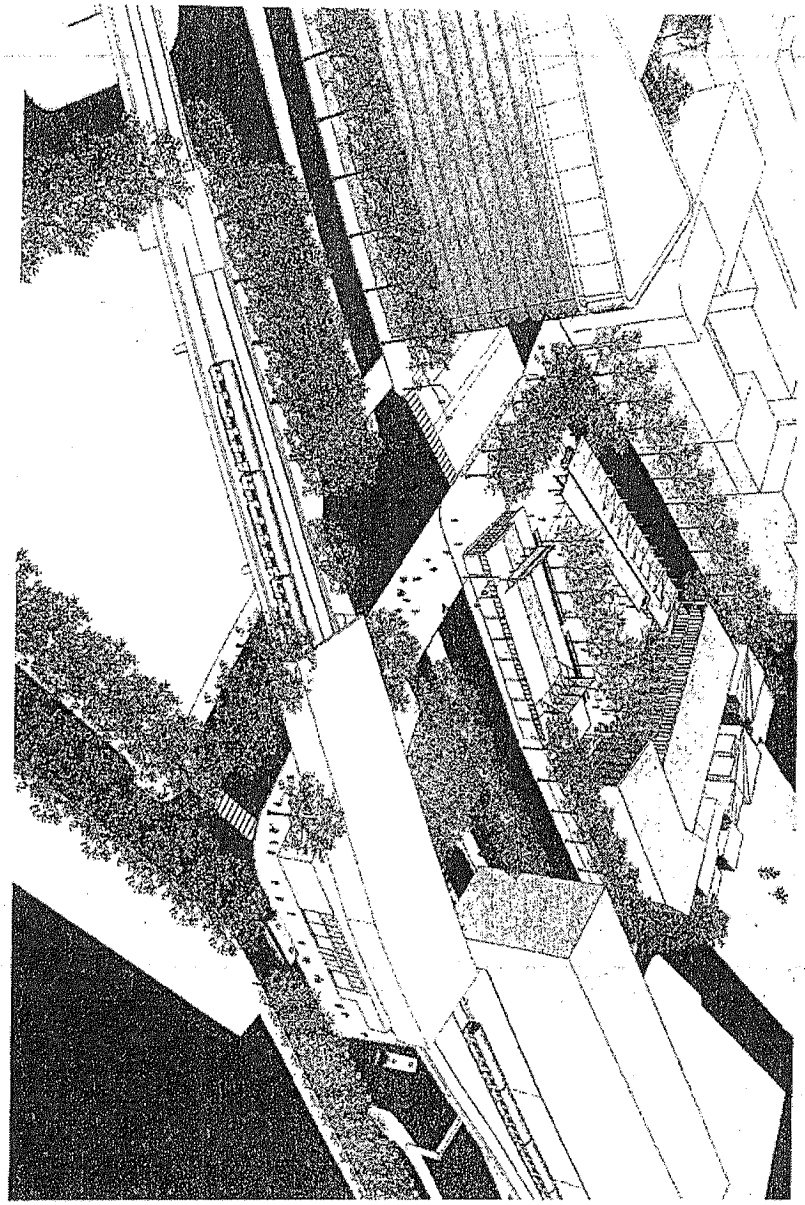

CAKE STREET
SECOND STREET
WATER STREET
EAST STREET
footprint
20,000 sf
footprint
16,200 sf

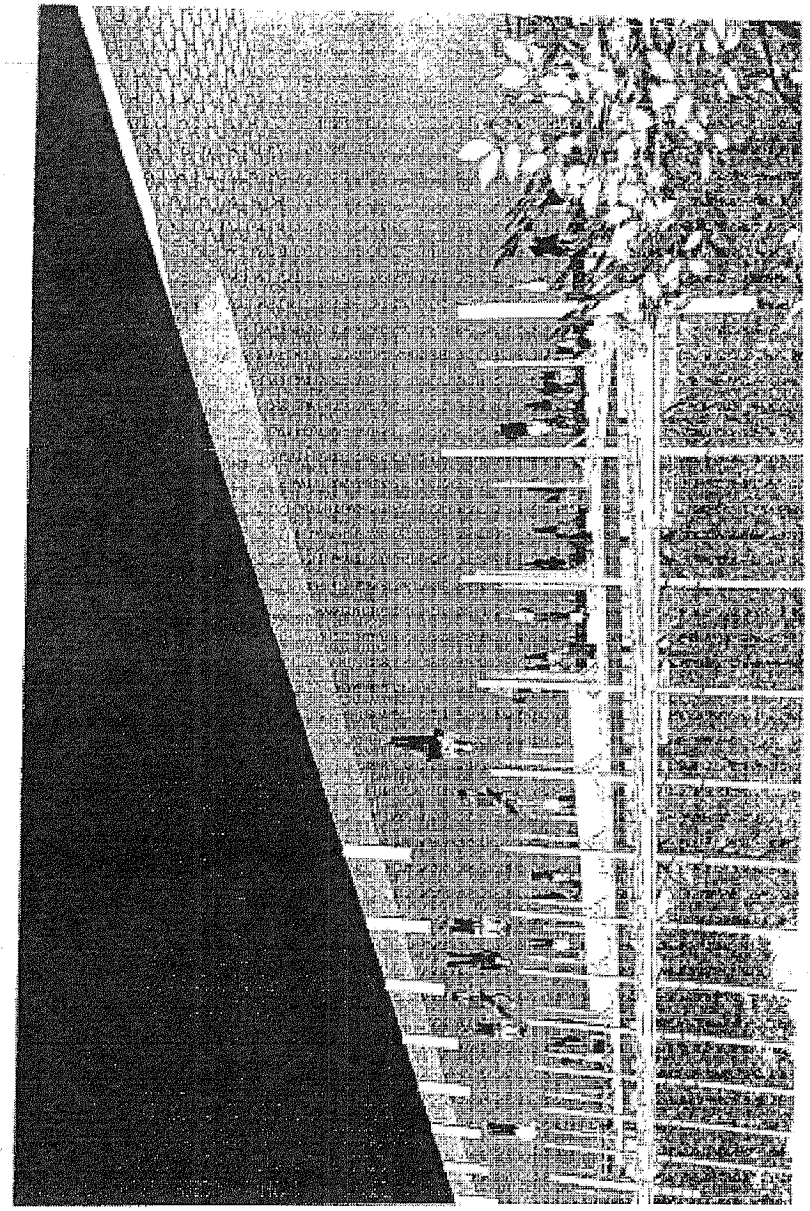
Current Permitted Plan- 180,000sf Development on One Parcel

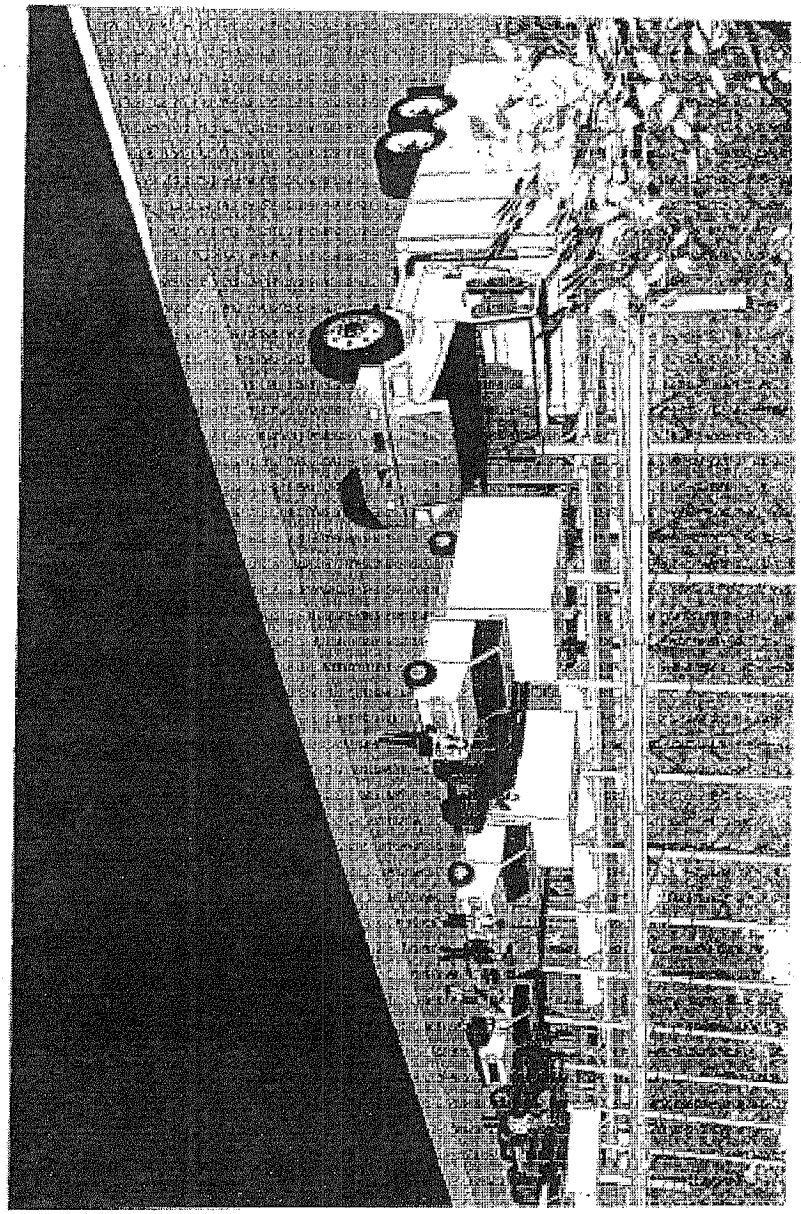
ECPT Proposal- 180,000sf Development Split to Two Parcels

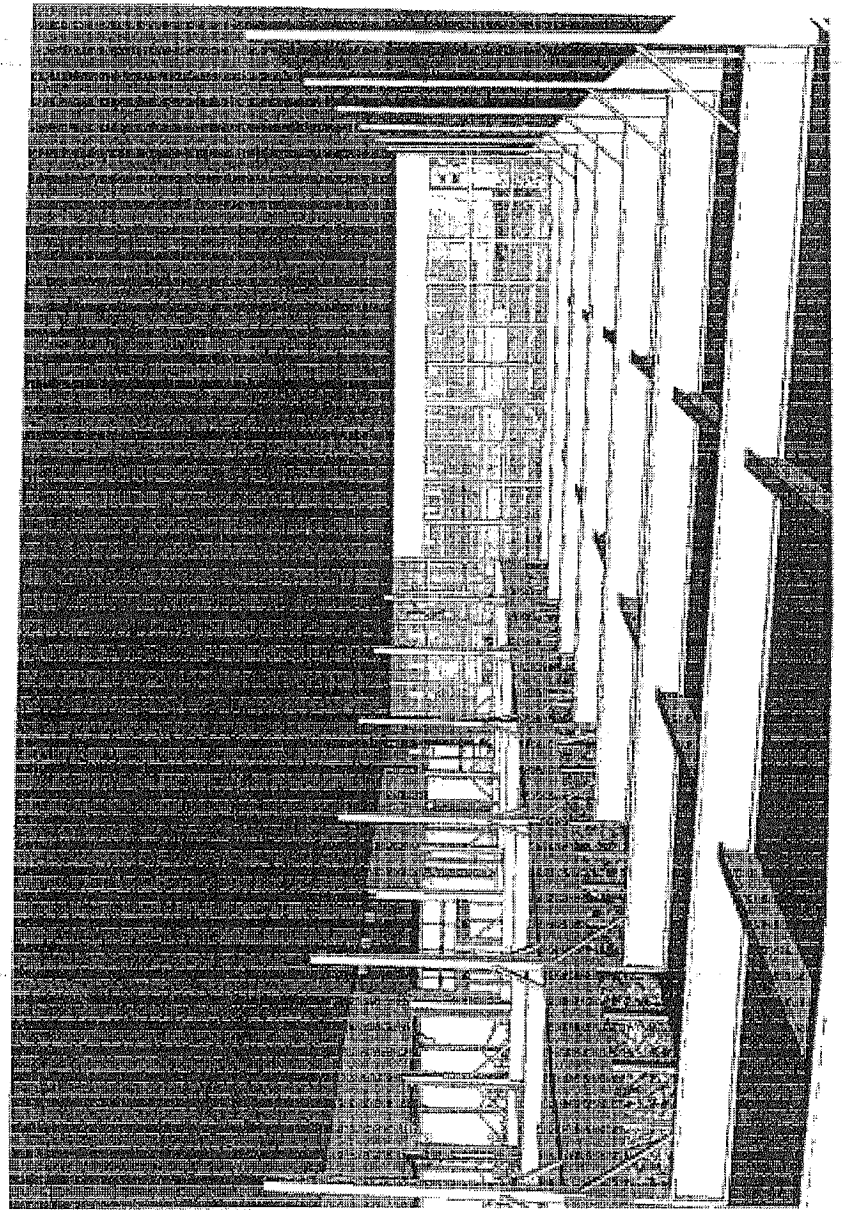


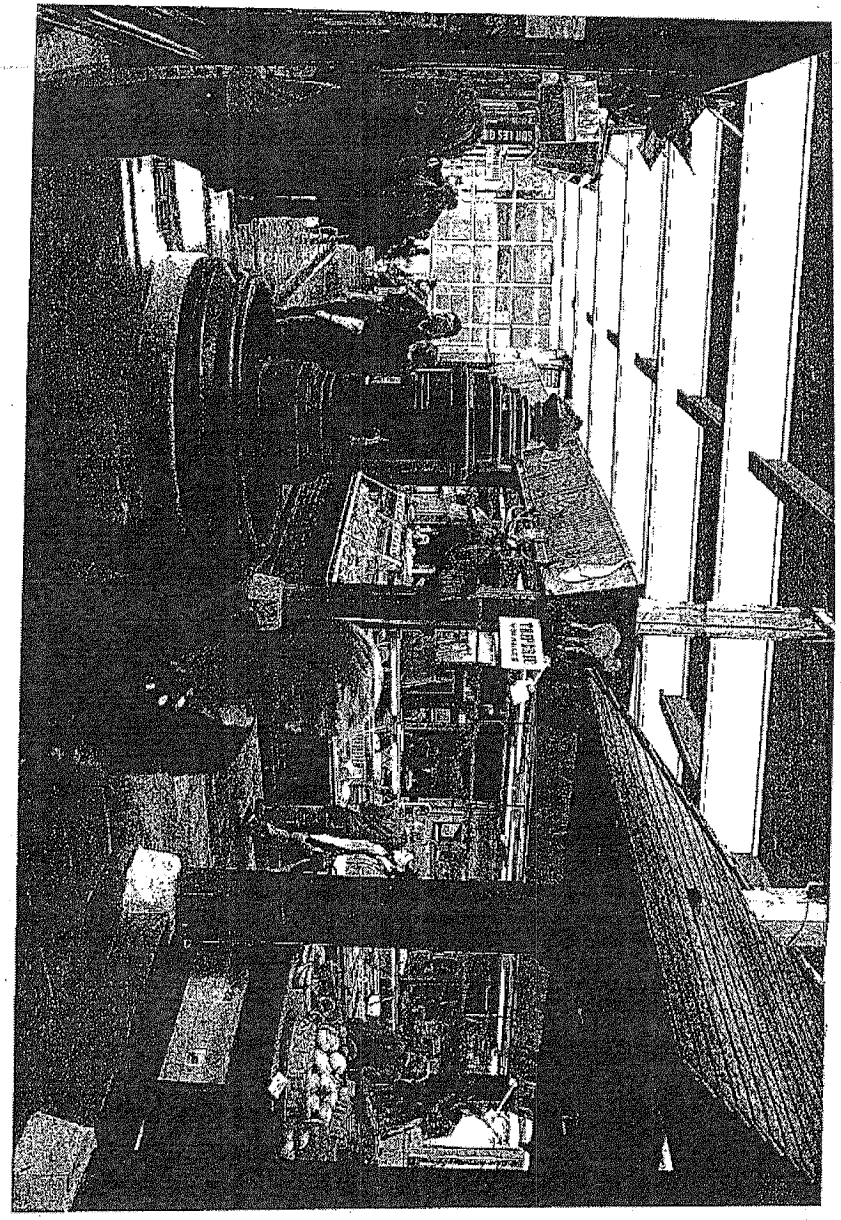


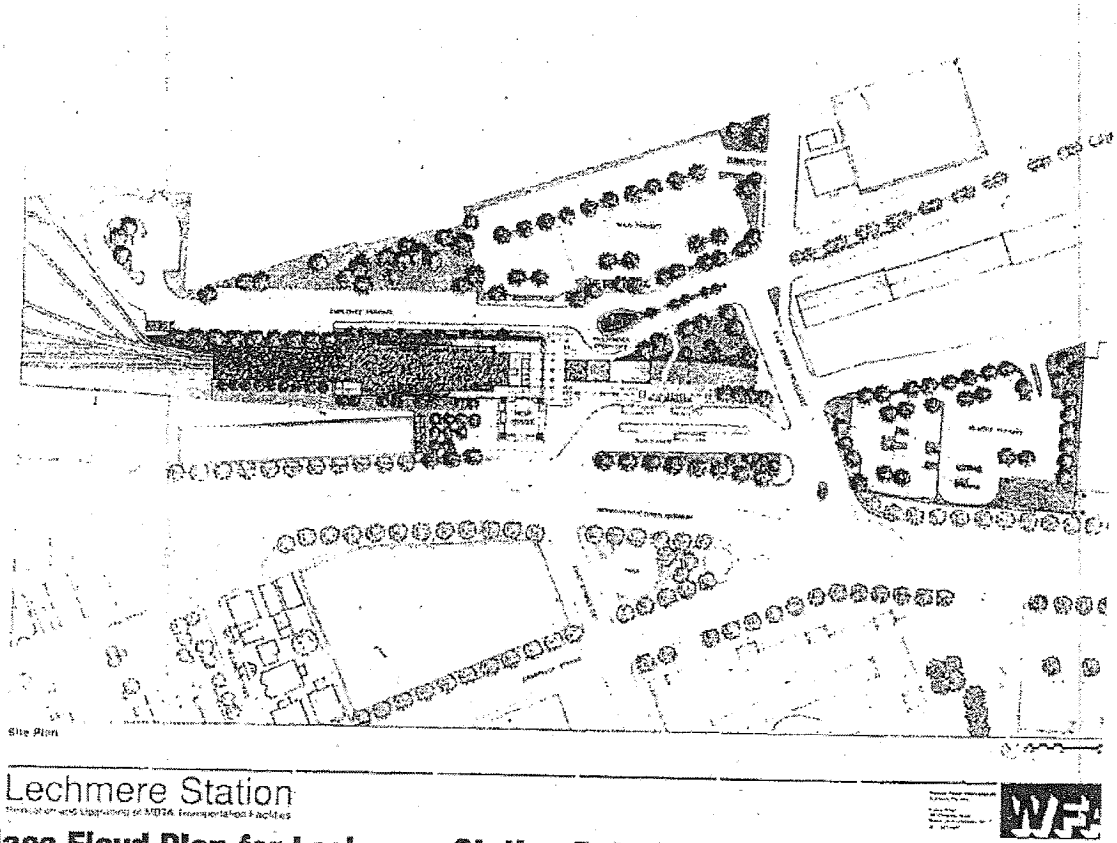




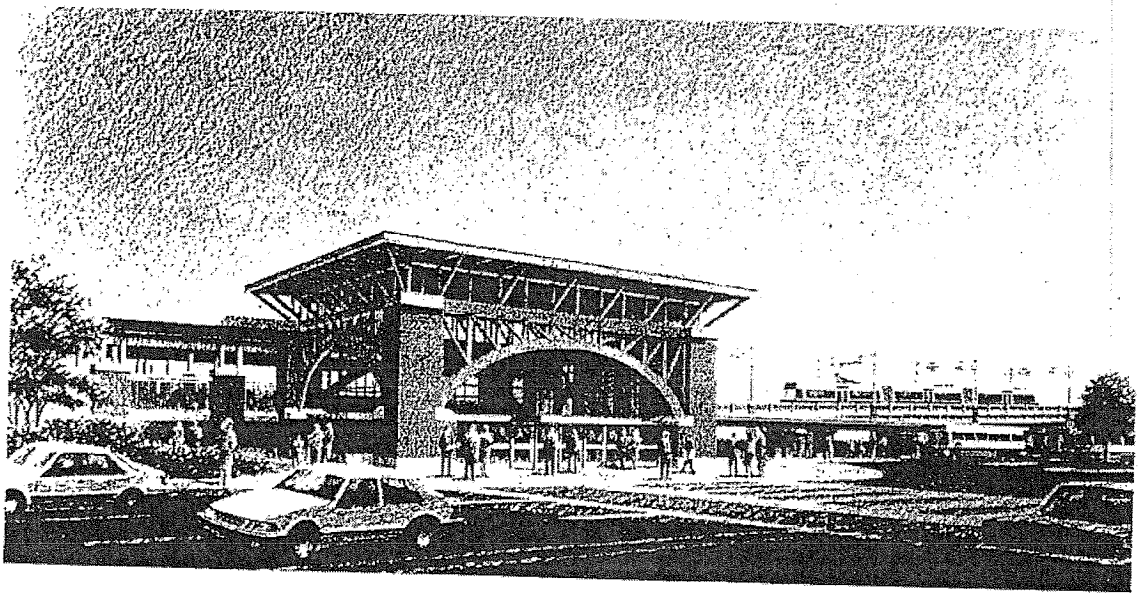




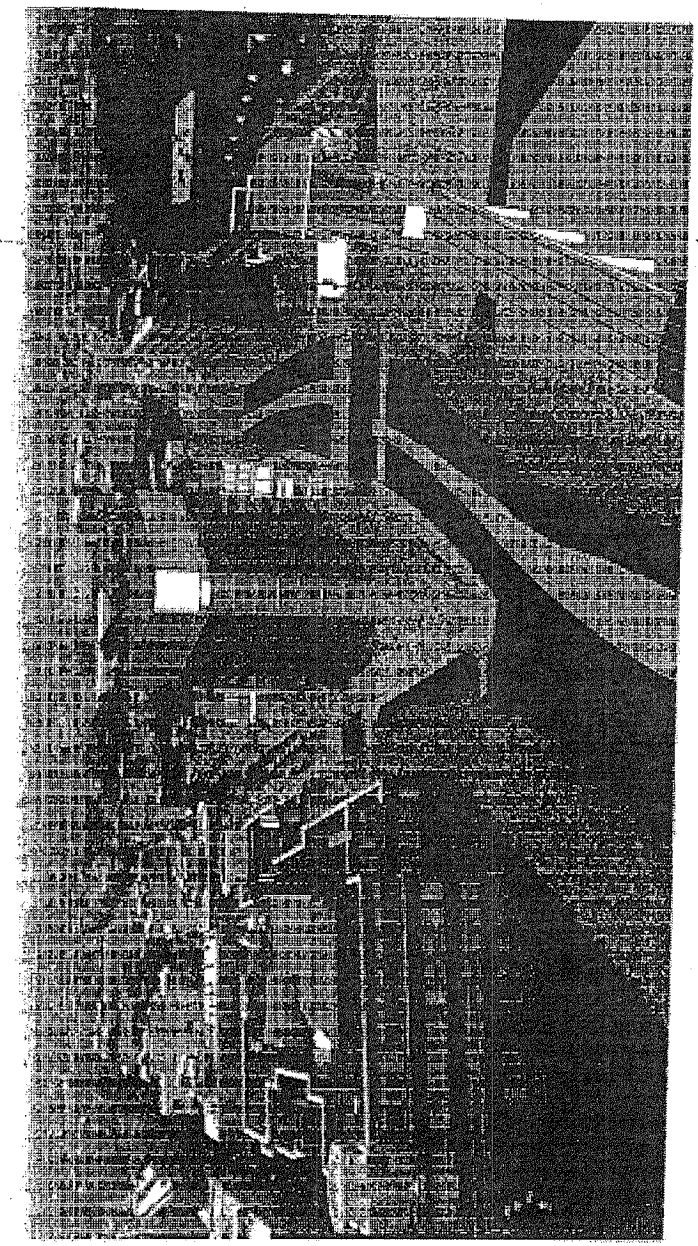




Wallace Floyd Plan for Lechmere Station Relocation, 1985



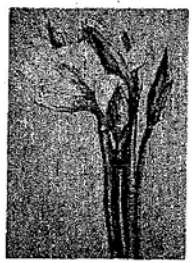
Wallace Floyd Perspective of Lechmere Station Relocation, 1985



Johnson, Holly (EEA)

From: Cynthia Maurice [cynnym@rcn.com]
Sent: Thursday, December 10, 2009 9:20 PM
To: Johnson, Holly S (ENV)
Subject: Urgent request for your consideration and support re: EOT &alternatives to Yard 8
Attachments: BB DEIR Letter 12-9-09.dot

Dear Ms. Johnson,
I am attaching my letter to you to consider the issues, deadlines and alternatives. (see attached) I very much appreciate your assistance.
--



C Y N T H I A M A U R I C E
Studios
One Fitchburg Street C303, Somerville, Massachusetts 02143
617-628-2430 cynnym@rcn.com www.cynthiamaurice.com

Cynthia

CYNTHIA MAURICE
Studio
One Fitchburg St. C323, Somerville, MA 02143
617-628-2450 / www.cynmaurice.com / email: cynnym@rcn.com

December 9 , 2009

The Executive Office of Energy & Environmental Affairs
MEPA Office
Att: Holly Johnson MEPA Analyst
EEA #13886
100 Cambridge St Suite 900
Boston MA 02114

Dear Secretary Ian Bowles:
Holly Johnson

RE: **Executive Office of Transportation (EOT)** Maintenance Facility & Storage Yard proposed for "Yard 8" Somerville : Proposal to build an **11-acre maintenance facility** on the parcel known as "**Yard 8**

I am writing you on an urgent issue: Urgent because there is a pressure of deadlines; u rgent because the Executive Office of Transportation, EOT, hasn't come up with alternatives despite a year of meetings with objections raised and discussed not only by «GreetingLine» residence but by the Somerville Mayor's office and adjacent communities. There is documentation that supports other workable solutions at locations referred to as Mirror H and Option L that meet the EOT's requirements for acreage and proximity without incurring costs.

So my first request is to ask you to research this problem: the pressure of deadline approaching with no alternatives offered by the EOT is unacceptable and frankly suspect.

I am one of the founding members of the two building «GreetingLine» Condo and Studios complex which established 200 residences and studios twenty -two years ago . We are a residential community , families with growing children living here. Over these past two decades we developed an annual Open Studios weekend event , free to the public. We have become a vital cultural center for Somerville , Cambridge and for the Greater Boston area. Having a maintenance facility abutting our property introduces environmental toxins, including air, sound and physical vibration which would **destroy** our quality of life, our property values and a renown cultural institution. This is egregious!

I-217-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-217-002

DEIR/EA Sections 5.7, Noise, and 5.8, Vibration, describe the noise and vibration impacts, respectively, expected from the Project. Pursuant to FTA-established guidelines, these impacts have been identified and evaluated for moderate and severe impacts to sensitive receptors. FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments, describes the mitigation measures that would be implemented to eliminate, minimize, or offset impacts above regulatory thresholds.

CYNTHIA MAURICE
Studio
One Fitchburg St. C323, Somerville, MA 02143
617-628-2450 / www.cynmaurice.com / email: cynnym@rcn.com

Based on my visit to the Riverside Maintenance Yard in Newton, I note how much space is required for trains and tracks surrounding a maintenance facility. A Maintenance facility in Yard 8 would take up vast acreage and cut off future land development with long term consequences for the growth for the city of Somerville. A huge loss for the city.

I-217-001 In sum, I am requesting a halt to EOT's proposed use of Yard 8 . That is, a decision that states that Yard 8 is not an option. I would like o have in writing an agreement that they are working to commit to an alternative plan. I would also like flexibility in current deadlines. The consequences are too grave to make a hasty decision under pressure.

I-217-002 I request that you research a more extensive cost analysis of noise, vibration for both construction phase and the permanent phase of such a project with dates of construction and completion. Even if this project is relocated to the alternative Mirror H or L its proximity will have environmental consequences for all of us unless it is planned and monitored well.

Thank you in advance for your assistance. I appreciate your help,

Yours respectfully,

«GreetingLine»
Resident and a founding member of «GreetingLine» Condos

Cc: Robert Martel, Manager,
Brickbottom Artists Condos

HS

CYNTHIA MAURICE
Studio
One Fitchburg St. C323, Somerville, MA 02143
617-628-2450 / www.cynmaurice.com / email: cynnym@rcn.com



The Executive Office of Energy & Environmental Affairs
MEPA Office
Att: Holly Johnson MEPA Analyst
EEA #13886
100 Cambridge St Suite 900
Boston MA 02114

Dear Secretary Ian Bowles ,
Holly Johnson:

RE: **Executive Office of Transportation** (EOT) Maintenance Facility & Storage Yard
Proposal to build a Maintenance facility on the parcel known as "Yard 8 Somerville :

I am writing you on an urgent issue: urgent because there is a pressure of deadlines; urgent because the Executive Office of Transportation, EOT hasn't come up with alternatives despite a year of many meetings with various community groups, Somerville political representatives and Brickbottom residents. In all thses meetings we all have raised objections to the Maintenance Facility proposed for Yard 8. There is documentation that supports alternatives, other workable solutions at locations referred to as Mirror H and Option L that meet the EOT's requirements for acreage and proximity without incurring costs.

So my first request is to ask you to address the problem: Pressure of deadlines approaching with no alternatives offered by the EOT.

I am one of the founding members of the two building Brickbottom Artists Condo and Studios complex which established 200 residences and studios twenty -two years ago . We are a residential community , families with growing children living here. Over these past two decades we developed an annual Open Studios free to the public. We have become a vital cultural center for Somerville, Cambridge and for the Greater Boston area. Having a maintenance facility abutting our property introduces environmental toxins, including air, sound and physical vibration which would **destroy** our quality of life, our property values and a renown cultural institution. This is egregious!

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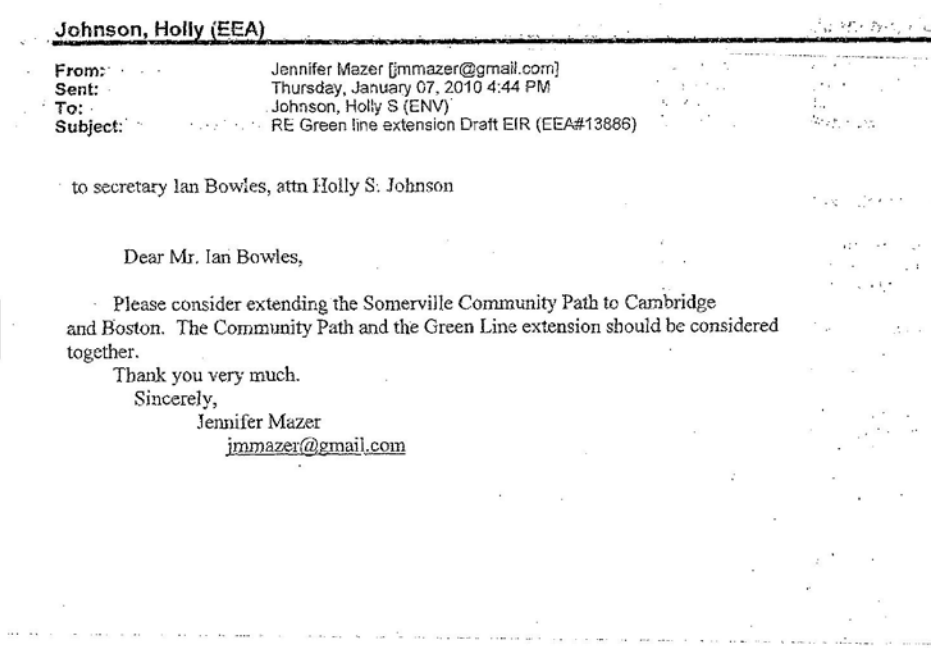
Thank you in advance for your assistance. I appreciate your help,

Yours respectfully,
Cynthia Maurice

Cynthia Maurice
Resident and a founding member of Brickbottom Artists Condos

Cc: Robert Martel, Manager,
Brickbottom Artists Condos



Johnson, Holly (EEA)

From: Jennifer Mazer [jmmazer@gmail.com]
Sent: Thursday, January 07, 2010 4:44 PM
To: Johnson, Holly S (ENV)
Subject: RE Green line extension Draft EIR (EEA#13886)

to secretary Ian Bowles, attn Holly S. Johnson

Dear Mr. Ian Bowles,

I-218-001 Please consider extending the Somerville Community Path to Cambridge and Boston. The Community Path and the Green Line extension should be considered together.

Thank you very much.

Sincerely,

Jennifer Mazer

jmmazer@gmail.com

1

I-218-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: taffy369@comcast.net
Sent: Thursday, November 19, 2009 12:54 PM
To: Johnson, Holly S (ENV)
Subject: Green line extension

I-219-001

I have lived in Medord all my life and am now a senior citizen. ***I strongly oppose the extension to Rte # 16.***
With no plans for a parking facility and such a congested area already near Whole Foods it will be a complete nightmare!
Many folks in the area are Seniors and can not walk very far especially in inclement weather. Prevaling thought seems to be everyone will just hop on the trains and that will eliminate traffic congestion. Nothing could be further from the truth! MVPkwy and Boston Ave is a very busy, dangerous intersection on a good day and with walkers and cars dropping off and picking up it will be **a mess!** Also folks from other towns already park in Medford all day hindering residents trying to do business in the city. We pay taxes here, not surrounding towns yet we are being ignored. Where will commuters park? Also it will depress the West Medford area with transients, just as the area is trying to improve. Please think about this. I watch the proceedings on Medford cable and this is being shoved down our throats. **Let it STOP at Tufts!!!!!.**
Sincerely,
K. McCarte

1

I-219-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

Johnson, Holly (EEA)

From: Brian McCarthy [bmcyaz@peoplepc.com]
Sent: Wednesday, November 18, 2009 2:46 PM
To: Johnson, Holly S (ENV)
Subject: Re: Reminder: Green Line Public Hearing on November 18 and Comment Period Extension

HI

I-220-001 | I can't imagine that Somerville streets are wide enough to have the green line go down them.

Brian

-----Original Message-----
From: Regan Checchio
Sent: Nov 18, 2009 10:37 AM
To: Regan Checchio
Subject: Reminder: Green Line Public Hearing on November 18 and Comment Period Extension

Dear Green Line Extension Friends -
This is a reminder that the Massachusetts Department of Transportation (MassDOT), formerly the Executive Office of Transportation, will present findings and recommendations from the Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) at a **Public Hearing** on **November 18, 2009 at 6:00 pm at Somerville High School - Auditorium, 81 Highland Avenue, Somerville, MA 02143**.
Members of the public, agency representatives, and other project stakeholders are invited to attend the hearing and to make comments on the project. MassDOT anticipates that a large number of people will comment at the meeting, so a time limit on remarks will be set, based on the turnout. We appreciate your cooperation with helping the meeting run smoothly.
Written comments may also be submitted to the MEPA office at:
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us
In response to public requests, the comment period has been extended to January 8, 2010. MEPA intends to announce its decision on the Green Line Extension DEIR on January 22, 2010.
The DEIR/EA for the project was filed with the Massachusetts Policy Act Office on October 15, 2009. It is is now available on the project website. Click hereto download the document. Copies of the document are still available by request from Regan Checchio by phone at 617-357-5772 x 14 or by email.
For more information on the project, please visit the project website at www.mass.gov/greenlineextension . To contact the project team, please email Kate Fichter. Please share this message with others who may be interested.
Thank you for your interest in and support of the Green Line Extension project.
The Green Line Extension Project Team

If you want me to cook the dinner, let me shop for the groceries --Brian McCarthy.

1

I-220-001

The Green Line Extension would not build a new light rail alignment within streets. Instead, the Project proposes to build new light rail transit lines primarily within the existing MBTA rights-of-way along the MBTA Lowell Line and Fitchburg Line commuter rail corridors.

Johnson, Holly (EEA)

From: sarahandandrew34@aol.com
Sent: Friday, January 08, 2010 10:59 AM
To: Johnson, Holly S (ENV)
Subject: Green Line extension

I-221-001

Dear Ms. Johnson- I live right next to the existing commuter rail line in Somerville. At present, the noise from the trains is tolerable, as they do not run that frequently, and do not run late at night. If the green line trains are indeed to be extended through Somerville, I would like some consideration to be given to noise control and pollution levels for those many people who live alongside the railroad tracks. I have lived on Richdale Avenue for many years, and have enjoyed the quiet of the neighborhood.While I understand that for most people this is not a major issue, I hope that everything possible will be done to minimize disruption to our lives.
Thank you,
Sarah R. McClellan

1

I-221-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Johnson, Holly (EEA)

From: Gail McCormick [gtmccormick@verizon.net]
Sent: Friday, January 08, 2010 4:56 PM
To: Johnson, Holly S (ENV)
Subject: green line extension

I-222-001 | I believe that it would be a very good idea to extend the green line into Arlington. Improved public transportation will help with the climate crisis in addition to providing a healthier environment for citizens of Massachusetts.

Gail McCormick
30 Hamilton Road
Arlington, MA 02474

1

I-222-001

A conceptual Green Line extension to Arlington would be a major new transit corridor well beyond the scope of the Green Line Extension project. As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

Johnson, Holly (EEA)

From: Jim McGinnis [jim02143@gmail.com]
Sent: Tuesday, January 05, 2010 9:40 AM
To: Johnson, Holly S (ENV)
Subject: Comments on Green Line Extension Project DEIR, EEA #13886
Attachments: GLE DEIR comments.doc

Dear Ms. Johnson,

My comments are in the attached letter.

Regards,
Jim McGinnis

James A. McGinnis
26 Bow Street
Somerville, MA 02143

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles and Ms. Johnson:

I am pleased to be able to comment on the Draft Environmental Impact Report prepared for the Green Line Extension Project, EEA #13886. I've long favored the Green Line Extension to Somerville and Medford, and have served on the citizen advisory groups to both the Beyond Lechmere MIS and the recent Green Line Extension Project.

First, I'd like to congratulate the project team on publishing the DEIR, albeit over ten months beyond its scheduled date. After so many delays following the original agreements in 1991 that allowed the CA/T project to proceed, every new delay raises questions about the Commonwealth's commitment to this project. I believe it is very important to push forward so that the Extension can begin operation by December 31, 2014, as required by the SIP. To meet that schedule, the storage / maintenance facility should be separated from the rest of the Green Line Extension Project, and defined in a Supplemental DEIR, or by some other means, to allow progress on the remainder of the project.

I-223-001

General station design issues

Even though the station designs in the DEIR are only at the conceptual stage, there are some general design issues that I wish to comment upon.

I-223-002

Several stations (College Avenue, Ball Square, Lowell Street and Union Square) are located where a roadway bridge crosses over the at-grade railway right-of-way. None of those proposed stations provide access on both sides of their bridge, instead putting two elevators, stairs and escalators on the same side. As a result it is likely that many pedestrians will attempt to cross the roadway near the station, and they will be at high risk because drivers cannot see well over the crest of these bridges. It would be much safer to have one elevator and stairs/escalator on each side of a bridge, and I strongly urge that this be required.

I-223-001

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed in the vicinity of the Green Line Extension right-of-way to maximize operating efficiencies.

I-223-002

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-223-003 The proposed stations apparently designed to be staffed, perhaps because the MBTA has normally had staff where elevators or escalators are present. I believe staffing is not needed at all stations, many of which are essentially just roofed platforms, and adds both capital costs and operating expenses that could be better used elsewhere.

I-223-004 For efficient intermodal connections to bus service, the optimal locations of bus stops and the pedestrian routes between those stops and the Green Line station must be analyzed and station design should reflect that understanding. Only the proposed relocated Lechmere station addresses this now, but (as noted below) it has other serious design drawbacks.

I-223-005 The amount of bike parking proposed, equal to about one percent of projected boardings, is not enough. Bike storage for at least three percent of the projected boardings should be available at each station, and as much as possible of this storage should be covered to encourage use in bad weather. Where demand is likely to be greatest – namely, Mystic Valley Parkway / Route 16, Lowell Street, and Union Square – more storage should be provided, preferably equal to five percent of the expected boardings at that station.

Specific station concerns

Union Square station:

In selecting the Fitchburg Line alignment over the McGrath Highway / Somerville Avenue options, it was acknowledged that access and visibility to the Union Square business district would be compromised. The station's design, and associated signage, must make obvious the stop's presence and the route to and from Union Square.

I-223-006 A major advantage of the Fitchburg Line station site is that it could eventually be extended to Porter Square serving large areas of both Somerville and Cambridge near the right-of-way. To allow for this without having to rebuild the station, the Green Line tracks should not collide with the Webster Avenue and Prospect Street bridge supports if extended. Allowing for this would require moving the commuter rail tracks to the south in the vicinity of the station, but might reduce the property taken in the Kiley Barrel area just north of the station.

I-223-007 The five bus routes now serving Union Square require safe, short and attractive pedestrian routes between their stops and the Union Square station. Note that Prospect Street and Webster Avenue are slated to become two-way roads within the next several years, so planning for pedestrian, bicycle and bus access must accommodate this. Once Prospect Street is two-way, it will not be safe to have crosswalks near its bridge because its rise will restrict how far drivers can see ahead.

While access from the Prospect Street Bridge will serve pedestrian coming from the south, it would be very desirable to have pedestrian (and bicycle) connections towards the heart of Union Square that do not involve a level change. The proposed station has such a pedestrian route paralleling Prospect Street on the east, but a similar path would be valuable on the other (west) side of Prospect Street. If possible,

I-223-003

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-223-004

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-223-005

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-223-006

As the Project advances into preliminary engineering, further

an ideal pedestrian connection would be an elevated walkway from the corner of Newton Street and Webster Avenue.

Lechmere station:

I-223-008 The conceptual station design that was inherited from the North Point project, and then cost-reduced in the DEIR, serves that stalled development at the expense of the existing, larger East Cambridge community. The station needs an entrance on the west side of the station at North First Street, with generously-sized sidewalks leading to the O'Brien Highway. Creating a safe crossing there will be a challenge: while the concept of a ground level crossing is good, it must be combined with a reduction in lanes at that point. A sub-committee of the East Cambridge Planning Team has proposed a station design that is worthy of serious consideration, and their proposal to reuse the current Lechmere station site for a public market and hotel is also very attractive.

I-223-009

I-223-010 I am puzzled by the retention of hundreds of parking spaces in the relocated station design. This will simply provide cheap parking for early morning commuters who drive from the northern suburbs and then park to take the Green Line for the last mile to work. These spaces provide no environmental benefits but instead subsidize undesirable transportation choices. I suggest that the MBTA sell this land so it can be developed for uses more valuable than parking. The proceeds could offset a small portion of the Lechmere station relocation cost.

Brickbottom station:

I-223-011 In the near future (until Inner Belt is redeveloped) most users of this station will either travel by bus, or will arrive on foot or bicycle from north or northeast of the station location. Given this, the station's proposed location 250 feet south of Washington Street needlessly lengthens the distance these riders must traverse. It has been said that this location was selected because of the willingness of the property owner to sell; if so, this is not a good enough reason for this choice.

The Brickbottom station should be located right on the south side of Washington Street, or perhaps on the railway bridge over Washington Street, to provide better access. Safe and efficient pedestrian crossings of this heavily-traveled roadway must be integrated into the design.

I-223-012 Medford Street station:

This station is not proposed in the DEIR, but the Union Square branch should be designed to facilitate its future construction between Route 28 and Medford Street. A station there would serve two nearby shopping centers and support the development of the southeast portion of Boynton Yards, recently zoned for intensive transit-oriented development.

Storage / maintenance facility

Somerville carries a disproportionate burden from regional transportation, including I-93, Route 28, and multiple diesel rail lines with no local service. These rights-of-way divide the city and limit mobility, slow

consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-223-007

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-223-008

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

emergency response, inhibit economic development and put air pollutants such as ultra-fine particles and diesel soot into the air. The Boston Engine Terminal in Inner Belt, built about 10 years ago and entirely within Somerville, services locomotives for the entire commuter system, most of which serve the region south of Boston. It occupies over 40 acres of land, emits vast amounts of noise, vibration and air pollution, and contributes no property taxes. It would be a cruel irony if the Green Line Extension, a clean electric light rail project that will finally restore some benefits from two of the railway rights-of-way crossing the city, would increase the inequitable transportation burdens on an environmental justice population due to a poorly located and designed storage / maintenance facility.

I-223-013 Even though numerous EENF comments pointed out the problems with the Yard 8 location over three years ago, inexplicably the project team delayed serious evaluation of alternatives until after many months had passed. To the despair of many project observers, most of the "alternatives" that the project team proposed and then quickly disposed of were simply too small to ever serve as potential sites, and seemed to have listed only to give the impression that a serious search had been conducted. The first and only potentially viable alternative that they have proposed, Option L, was not published until just before the DEIR.

I-223-014 The DEIR preferred alternative, Yard 8, can be seen as a reasonable choice only in the absence of any real land use planning. The Inner Belt and Brickbottom districts comprise over 100 acres of industrial land perfectly situated for transit-oriented mixed use development. The buildings in Inner Belt were flattened 50 years ago to make way for the ill-conceived highway project of the same name, and it has never recovered. This area has been cut off by the Route 28 McCarthy overpass on the west, the Fitchburg Line on the south, and railways and I-93 on the east, and is sliced up by railway berms carrying the Lowell Line and freight trains.

Although the project team has frequently stated, and does so again in the DEIR, that this area has had railway uses for over a hundred years, the existence of this historic burden does not justify continuing or increasing it. Their argument is absolutely incompatible with the principles of transportation equity and environmental justice.

Three options for the storage / maintenance facility sites are noted in the DEIR: Yard 8 (the preferred alternative), Mirror H and the new Option L. All of these options put the entire facility in Somerville, except for Mirror H where about five percent would be in Cambridge. As noted previously Yard 8 creates an unacceptable barrier to the Inner Belt district from the west, and also imposes noise and vibration on the Brickbottom residences. Mirror H is compatible with Inner Belt development, but may not be acceptable to North Point and other nearby East Cambridge stakeholders. Many of them hoped that structured garages to be built in that location as part of the North Point project would shield them from the BET. The City of Cambridge has expressed firm opposition to Mirror H as well.

I-223-015 As a result I feel that Option L is the only possible option today. It certainly needs to be studied and improved, but in its current form is not acceptable. One problem is that much of the train storage is located near to Brickbottom, along with the switches and other special track work that generates vibration. It also takes valuable commercial properties, and may interfere with connections for the

I-223-009

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-223-010

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-223-011

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-223-012

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-223-015

Community Path, Urban Ring and potential roadways between Inner Belt and North Point. As a start, I believe this facility can be made smaller, thereby reducing land takings, capital costs and lost tax revenue for Somerville, and also the area of impervious surfaces created by access roads and parking.

I-223-016

The reason the facility can and should be made smaller, or at least its car storage and employee parking areas, is to recognize that the amount of storage called for by the DEIR, 72 to 80 cars, far exceeds the cars used to provide Green Line service beyond North Station. At most 22 cars can be in service on the Green Line and the Extension north of North Station (this assumes the stated travel times with 5 minute headways, and two car trains.) Another way to calculate the equitable storage capacity is to add the 20 cars now stored at Lechmere to the 27 to be purchased for the extension for a total of 47. This result indicates that Lechmere is now storing cars used in Boston or elsewhere in the system, and that the number of new cars to be purchased for the Extension may be somewhat inflated.

Even as the DEIR proposes to store cars in Somerville that will not serve the northern branches of the Green Line, the MBTA is soliciting development proposals for surplus land at its Riverside maintenance facility, and there is talk of closing the Reservoir and Cleveland circle storage locations. To residents of Somerville, this seems to perpetuate a long-established pattern of shifting transportation burdens from wealthier communities onto us.

I-223-017

It may take a number of months to reach an acceptable resolution of the many issues surrounding the storage / maintenance facility, and this would almost certainly delay completion of the Green Line Extension Project unless this work is in some way separated from the rest of the project. Proponent asks that the DEIR should be accepted as a Final EIR, and that they will file a Notice of Project Change when (and if) they decide to pursue a different option for the facility. Unfortunately, past experience with the way that this issue has been treated by the project team makes it hard for me, and for many others, to accept their assurance that they will diligently and fairly apply their best efforts. Therefore I request the Secretary require development of a Supplemental EIR for the storage / maintenance facility to permit the rest of the Green Line Extension project to move forward.

<u>Medford branch terminus</u>

I-223-018

It would be tragic if the Green Line Extension Medford branch was cut short at College Avenue. First, because College Avenue cannot plausibly be represented as within Medford Hillside, or even on the edge of Medford Hillside, the project would not conform to the SIP. Second, College Avenue is ill-suited as a terminus due to its roadway configuration: in addition to depriving Medford Hillside of transit service, would also burden it with added traffic. Finally, the value to the Commonwealth of the Green Line Extension, whether measured in air quality improvement, better mobility, or economic benefits, would be greatly reduced by truncating this branch.

I-223-019

I-223-020

I-223-021

I realize this decision was primarily motivated by the lack of funding for a project recently burdened with the costs of the Lechmere station relocation. Since the City of Cambridge and Pan Am Systems (Guilford) are the primary beneficiaries of this relocation, ideally some way should be found for them to pay for a portion of the costs to carry out commitments orlginally made by the North Point developers.

I-223-013

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-223-014

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-223-015

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the

I-223-022 Assuming the terminus will be at Mystic Valley Parkway / Route 16, the station need not take the commercial buildings at 200 and 220 Boston Avenue as proposed in the DEIR, nor does it need extra acreage for a possible parking structure. (In spite of explicit direction to the contrary in the EENF Certificate, the project team persisted in advocating a 300 to 500 car structure at this location until just before the DEIR was released.) The Medford Green Line Neighborhood Alliance (MGNA) has produced an alternative plan that avoids these takings, and the project team is said to have told the Medford City Council that they were working on a similar design, but have not provided any details.

I-223-023 I think the MGNA design has merit, but i would like to see it amended to facilitate a possible future extension of that Green Line branch across the Mystic River. This calls for a slight change in the terminal track alignment but should be feasible.

Public process

I-223-024 It will be important to establish a Citizen's Advisory Committee for the project as a whole, as well as distinct CACs for the storage/maintenance facility, the Union Square station, the Mystic Valley Parkway / Route 16 station, and one for mitigation to abutters and others seriously impacted by the project. Based on the limitations that emerged with the prior Advisory Group, these CACs should function as described by MEPA section 11.09. I feel strongly that a CAC able to set its own agenda, meet when it deems it necessary, will be more effective in resolving issues such as the storage / maintenance facility location. In addition, there needs to be early and continuing outreach with stakeholders for each of the other stations. With the aggressive schedule needed to begin operation by the end of 2014, it is critical that this project implement more effective ways to get community input and to resolve controversy.

Sincerely,

James A. McGinnis

evaluation, Option L is identified as the preferred maintenance facility site.

I-223-016

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-223-017

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

I-223-018

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the

Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-223-019

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-223-020

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

I-223-021

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-223-022

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-223-023

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-223-024

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

From: 01/07/2010 21:30 #008 P.003

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-224-001 As a resident of East Cambridge, I am concerned about the design and placement of the Green Line Extension and the new Lechmere Station and the effect it will have on my friends & neighbors at the Glass Factory.

TRACKS ARE TOO CLOSE TO THE GLASS FACTORY.
The present design shows the tracks running very close to the rear of the building. We urge your designers and engineers to place the tracks as far to the rear of the building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of the building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of the Glass Factory, pick up passengers, and emerge at the other end of the building. Please do not route bus traffic, directly under people's windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from the building to preserve privacy and minimize impacts from noise, light and smoking.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind the Glass Factory. I urge you to preserve all these trees and the entire small green space behind the building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-224-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of the building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to the building.

Thank you for hearing my concerns.

Sincerely,

Marie Mclaro
Signature

Marie Mclaro
Print Name

17 Second St Camb
Address

From: 01/07/2010 21:28 #007 P.003

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-225-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-225-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Charles J McNeil
Signature

Charles J McNeil
Print Name

169 MSGR-OB-Hwy #201
Address

Johnson, Holly (EEA)

From: thom3@aol.com
Sent: Thursday, January 07, 2010 1:47 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Ian Bowles,

I-226-001 Please commit to the extension of the Somerville Community Path. Thank you for your continued efforts in the matter.

Tom Meek
Avid biker and Cambridge resident

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I-226-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: Melnechuk, Eve [Eve.Melnechuk@pearson.com]
Sent: Thursday, January 07, 2010 5:40 PM
To: Johnson, Holly S (ENV)
Cc: Me@home Melnechuk
Subject: Somerville Community Path---comments on the DEIR

Dear Secretary Bowles and Ms. Johnson,

I support the extension of the the Green Line to Somerville and Medford and the extension of the Somerville Community Path along with it.

I urge that the following be incorporated into the DEIR:

I-227-001 • The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the former EOT.

• That for cost efficiencies and technical necessities, the Green Line and Community Path extensions will be constructed as one project and must clearly be described as such by MassDOT.

I-227-002 • MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding that allows bicycle and pedestrian access costs.

Thank you,

Eve Melnechuk
30 Avon Street
Somerville, MA 02143

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I-227-001

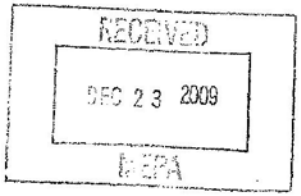
MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-227-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

HJ

The Executive Office of Energy and
Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge Street, Suite 900
Boston, MA 02114



Dear Secretary Ian Bowles,

As a twenty three year resident of Brickbottom, I am delighted at the prospect of the Green Line extending to our neighborhood and to Somerville. Since our first days here, the biggest drawback many of us consider when describing our neighborhood is its non-pedestrian friendly nature. The Green Line would change that aspect, make this area more livable, accessible, walkable, and "green". Along with these changes, there is the hope that the industrial nature would gradually give way to more exciting and creative development for Somerville.

I-228-001

These possibilities for our immediate area are crushed by the Yard 8 plan, and one wonders how we here at Brickbottom would survive with the constant noise and whatever other conditions were created as a result of this facility being placed there. There seems to be very little mitigation planning. What would the Facility placement at Yard 8 do to potential development for Somerville? How thorough is the DEIR? These two factors alone make it worth considering Scheme H and Scheme L.

I-228-002

It has been enlightening to see this project studied, discussed, and to see it evolve through community meetings and involvement. It seems most important that a Community Advisory Committee be instrumental in each step. The stakeholders in the neighborhoods most affected are the most important voices to be heard as this project moves forward.

I appreciate your further study in this matter, and continuing consideration of alternatives to Yard 8.

Sincerely, Chris Mesarch
Chris Mesarch
1 Fitchburg Street
C306
Somerville, MA. 02143

I-228-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-228-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

Johnson, Holly (EEA)

From: Kevin Mitchell [mitchellkp@yahoo.com]
Sent: Sunday, January 03, 2010 6:46 PM
To: Johnson, Holly S (ENV)
Subject: Extend the Green Line to Route 16

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-229-001 I strongly support the Green Line extension and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. I had hoped it would extend to West Medford Station to serve that neighborhood, but I am happy to still have a station that is in walking distance at Route 16. College Avenue would not serve my needs.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

I-229-002 In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.
For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.
The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

I-229-003 2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

I-229-004 3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be. I look forward to the Green Line extension to better serve Boston and the surrounding towns of Medford, Somerville and adjacent towns.

I-229-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-229-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-229-003

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-229-004

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may

Thank you.

Regards,

Kevin Mitchell
88 Monument Street
Medford

achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Karen Molloy [karenmolloy@gmail.com]
Sent: Friday, January 08, 2010 3:37 PM
To: Johnson, Holly S (ENV)
Subject: Comments on the Green Line Extension Draft EIR (EEA #13886)

January 8, 2010
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles,

I-230-001 I strongly support the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville. I am writing you to recommend approval of MassDOT's DEIR as the final EIR with the caveat that some critical issues lacking mention or sufficient planning are resolved in the next phase of the project.

I-230-002 Station design
==========
I strongly recommend that the station designs accommodate bus drop off and pick-up areas with the best possible integration of transit modes with minimal impact to the street. The DEIR does not mention bus connections to the stations. As was done for the Red Line Harvard-Alewife extension, bus routes in Somerville will need to be aligned to optimize connections to Green Line stations simultaneous with the start of Green Line Extension service.

The overall plan for this extension is to encourage neighborhood commuting and connections; thus good design of bus, pedestrian, and bike connections is paramount. See the Davis Sq Red Line station as an example of a station that accommodates its percentage of ridership traveling to the station by bus, foot, and bike. (The current ped/bike connections to some of the stations in the DEIR are poorly designed; the relocated Lechmere station described in the DEIR is an example of poor design.) Also the amount of bike parking in the DEIR is insufficient. Stations should provide adequate sheltered bike storage.

I-230-003 Community Path
==========
I appreciate that MassDOT will include the design on the Community Path and its connections to the stations in its plans. As it will serve as an important direct carfree means of getting to the stations, the Path should be built concurrently with the Green Line Extension.

The Community Path will provide important off-road bicycle and pedestrian access to the stations, offering great connections to the neighborhoods which in turn will attract more riders in a cost-effective way.

The Path is a prime example of the new Federal Transit Administration policy on ped/bike access to public transportation, which recognizes the importance of maximizing multi-modal access.

Maintenance Facility

1

I-230-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-230-002

Current MBTA bus routes are described in DEIR Section 4.5.1, Existing Bus Services, and shown in Figure 4.5-1, Existing and Proposed MBTA Bus and Transit System. MBTA regularly evaluates and revises bus routes to accommodate service needs; the most recent evaluation is provided in the MBTA's *Preliminary 2008 Service Plan*. In accordance with the Secretary's Certificate on the DEIR, bus routes in the Green Line Extension service area will be evaluated during the Project's preliminary engineering phase. MassDOT will coordinate with MBTA and the Green Line Extension Advisory Group to consider modifying routes to improve access to Green Line Extension stations and maximize bus and rail ridership. Convenience and accessibility of the bus/rail transfer points will also be considered.

In accordance with the Secretary's Certificate on the DEIR, emphasis will be placed on bicycle, pedestrian, and bus access as station designs are refined during preliminary engineering. Access for environmental justice and disability populations will be carefully evaluated in compliance with federal and state access laws, regulations, and codes. Automobile access, including drop off/pick up areas, station parking, and station area parking policies will also be taken into consideration as they relate to local traffic concerns and station designs. The Public Involvement Plan, Chapter 6 of the FEIR, details MassDOT's plans for public outreach in the next phases of the Project.

I-230-003

MassDOT has committed to complete the final design of the proposed

I-230-004

==========
I strongly recommend that the Yard 8 Option for the Maintenance Facility be eliminated as per the City of Somerville's and Somerville citizens' longstanding strong opposition to this option from the day it was unveiled. The Green Line Extension is meant to encourage economics development. In placing the Maintenance Facility in the sole undeveloped area of Somerville, it denies the potential use of that area as economically viable. The Boston Engine Terminal already sits on huge tax-free area in Somerville; all along we have encouraged MassDOT to analyze the use of some of that area for the Maintenance Facility. I was encouraged by MassDOT's recent unveiling of Option L, and recommend that option be pursued for the siting of the Maintenance Facility.

I-230-005

Route 16 Terminus
==========
I strongly recommend that the Route 16 terminus be designed and built at the same time as the rest of the Green Line project.

I appreciate the opportunity to make these comments. As a car-free resident of Somerville for 23 years, I recognize the tension between getting this project done versus getting it done well. This Green Line Extension will outlive us all and serve many future generations. Let's make sure it results in a transit project done in the best way possible to serve both current needs and those future generations of transit riders.

Thank you for your consideration.

Sincerely,

Karen Molloy
197 Highland Ave.
Somerville, MA
02143

==========
karenmolloy@gmail.com

Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-230-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-230-005

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), “Determination of Air Quality Emission Reductions.” These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

received via email 1/8/10 HJ

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 11 2010
MEPA

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

I strongly support the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville and believe its positive environmental impacts greatly exceed the potential negative impacts.

I-231-001

However, because of shortcomings and omissions in the design, I cannot support this Draft EIR becoming the Final EIR unless a Supplemental EIR or Addendum is performed to correct the deficiencies. I also request that a Citizens Advisory Committee public process be instituted to help guide these necessary design improvements.

To avoid the significant delay that a separate FEIR would entail, the most critical issues with the DEIR could either be addressed in a Supplemental EIR, or in Addenda to the FEIR.

My comments on these issues are in three sections: on the Somerville Community Path, the maintenance and support facility and finally, other issues. Thanks you very much for considering them in your analysis.

A. INTEGRATION OF THE GREEN LINE AND COMMUNITY PATH EXTENSIONS

Main points on Design, Funding and Construction (followed by details):

I-231-002

- I think that the Community Path design from Lowell St. to Washington St. as shown in Appendix E of the DEIR is excellent. Its implementation will be a great benefit for the Green Line and its ridership as well as an asset to Somerville and the region. As the location of the support facility is finalized, the route of the Community Path from Washington St. to Lechmere in Cambridge should be re-evaluated.

I-231-003

- The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT.
- That for cost efficiencies and technical necessities, the Green Line and Community Path extensions will be constructed as one project and must clearly be described as such by MassDOT.
- MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding for allowed bicycle and pedestrian access costs.

I-231-004

- The planned amount of bicycle parking is insufficient and pedestrian connections to some of the stations could be better designed. Also, the DEIR does not show at all how bus connections

I-231-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-231-002

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-231-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-231-004

will be made to the new stations. I look forward to those improvements during the final design process.

Details:

Funding and the Importance of the Community Path – If funding is not available at the right time such that the Community Path can be constructed along with the Green Line, it likely will never be built as it will cost many times more to construct it as a separate project. The City of Somerville has about $3 million for the $15 - $20 million Community Path extension estimated cost. The reasons that I feels that this request for State and Federal transit funding is reasonable and appropriate are as follows:

- The Community Path will provide desirable off-road bicycle and pedestrian access to the stations, offering superior connections to the neighborhoods (like in Davis Sq. where 60% of the residents use public transportation and thousands walk and bike to the station each day), thereby attracting more riders in a very cost-effective manner. More riders means a greater change of getting federal New Starts funding.
- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is in integral part of the station access, allowing the Davis Square station success to be replicated.
- The only way the Path can realistically be constructed is together with the Green Line extension.
- Other infrastructure not absolutely needed for the Green Line extension have been included (car drop-offs, redundant elevators and escalators, storage for twice as many Green Line cars as necessary, station fare collection rather than on-board, etc.) So it's also reasonable that Community Path costs also be included.
- The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop ... may be eligible for FTA funding" http://edocket.access.gpo.gov/2009/E9-27240.htm
- There are at least two transit precedents in the Boston area for community paths constructed by the MBTA transit projects with State and federal funding:
  - The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
  - The Southwest Corridor Path alongside and over the Orange Line

There are many recent examples around the country of paths being built together with mass transit expansions:

- The Capital Crescent trail alongside the planned light-rail Purple Line in suburban Washington DC includes trail construction is part of the project and the cost estimates that will be submitted for New Starts funding from the federal government.

  http://purplelinemd.com/images/stories/purpleline_documents/deis/deis/10_chapter5.pdf
  http://purplelinemd.com/images/stories/purpleline_documents/deis/Conceptual%20Plans%2009%202008.pdf

- Bicycle and pedestrian path alongside the light-rail Expo line in Los Angeles:
  http://buildexpo.org/gallery.php
  http://metro.net/projects_programs/exposition/feis.htm

I-231-004

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

- A world-class bikeway was built alongside and integrated with stations on the 14-mile Orange Line BRT corridor in LA:

  http://www.streetfilms.org/las-orange-line-bus-rapid-transit-plus-bike-path/

The Somerville Community Path is a critical piece of the following regional and State-wide bicycle and greenway plans.

- The Massachusetts Bicycle Transportation Plan (page 30 and 45 and Figure 4): http://www.massbikeplan.org/_docs/Massachusetts%20Bicycle%20Plan%20with%20Links%20to%20Graphics.pdf
- The Somerville Community Path as part of the critical 104-mile east-west Mass Central Rail Trail (Figures 4.1 and 4.2): http://www.masscentralrailtrail.org/
- The City of Somerville's Open Space and Recreation plans list the Community Path
- The Mystic Valley Case Statement for Active Transportation for the Mystic River Communities: http://www.railstotrails.org/resources/documents/whatwedo/case_statements/Vision%20for%20July%2010th%20draft.pdf
- The 2007 MAPC Regional Bicycle Plan - http://www.mapc.org/transportation/trans_alternatives/Bike_plan_PDFs/Bike_Plan_FINAL_version_3-14-07.pdf

I-231-005 | *Community Path from Lowell St. to Route 16*: The MEPA certificate said that the environmental review would include evaluation of continuing the Community Path west of the Lowell St. station to Medford. The study results that were presented (Appendix E of the DEIR) concluded that the width of the ROW was insufficient to provide such a continuous Path. However, since there are some sections where there is enough width; a route, perhaps with connection to local streets, should be studied further.

I-231-006 | *Community Path from Route 16 to West Medford*: Section 3.2.3 of the RFP said that VHB should study "*Using the bikeway/pathway guidelines, consider options for providing pedestrian connections to the West Medford commuter rail station and evaluate the viability and potential impacts of including a community path in this section of the project area.*" This seems not to have been done but should be. Such a Path would make a transfer connection from Route 16 to West Medford. Therefore MassDOT should plan for a community path to connect the Route 16 terminus to West Medford via an overpass of Route 16, a bridge over the Mystic River and a route along the Lowell commuter rail tracks.

I-231-007 | *Access to Route 16 Station* - The plans in the DEIR document do not show how Green Line riders will safely access the Route 16 station from Arlington and Medford and from the Alewife Brook paths that are being improved as part of a $3.6 million ARRA stimulus project. A multi-use path for pedestrians and bicyclists to the station should be included in the design from the Alewife paths to the station. Please request that MassDOT perform this design.

I-231-008 | *Bicycle Parking* - The amount of bicycle parking presently described in the plans (270 spaces) is very welcome but will be insufficient for the expected number of bicyclist coming to the stations. 270 spaces is only about 1% of the expected ridership. Based on the present parking at Red line stations, bike parking at 3-5% of ridership will soon be needed. Therefore I request that the amount of bike parking be increased to approximately 5% at the Union Square, Route 16 and Lowell St. (major intersection with Community Path) stations and 3% at the remainder. Also, the location of the bicycle parking (where specifically shown in the plans) are good at some locations but not at others. The bicycle parking locations should be as close to as possible to the entrance and in well lit and safe locations. Lastly, bicycle parking should be covered if at possible.

I-231-005

DEIR/EA Section 3.8.2 and Appendix E include an analysis of this potential community path connection to Medford. As presented in the analysis, a community path along the Green Line Extension Medford Branch corridor north of Lowell Street Station is not viable due to right-of-way constraints. The analysis also concluded that adjacent Boston Avenue has insufficient pavement width for a community path or on-street bicycle lanes.

I-231-006

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16.

I-231-007

Please see response to Comment I-231-006.

I-231-008

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

Improved pedestrian and bicycle access – access could be vastly improved at some of the stations by having more than one entrance or access point such as:

I-231-009

- a direct connection from the Gilman Square station to the Somerville High School/Library/City Hall complex)
- the Washington St. station design which seems particularly poor in this regard for riders coming from the west and north. This could be greatly improved by locating the station directly above Washington St. where direct access via elevator would be possible (earlier designs included such a layout).
- station designs (specifically College Ave and Washington St.), where drop-off (kiss and ride) stops are directly in front of the entrance while pedestrian access is a long and involved route.

I-231-010

- Lowell St. station where a direct connection to the platform from the Path coming from Cedar St. would be possible via a safe crossing of one track. MassDOT has said this would not be allowed because of safety concerns even though every light rail system in the US (including in Boston: Longwood stop on the Green Line and Milton and Butler stops on the Mattapan line) allows crossing of tracks for access. Even if MassDOT will not allow this access point at this time, the Lowell St. station platform should be designed for such future access.
- In general, pedestrian and bicycle access should be given higher priority in these "community-based" station designs that motor vehicles connections.

I-231-011

Community Path costs – I understood that the marginal (extra) costs for constructing the Community Path between the stations was to be provided but I don't see them in the DEIR. They should be provided.

I-231-012

Community Path Route from Washington St. to Lechmere - the Somerville Community Path route should connect the Washington St./Brickbottom station, the Brickbottom community and Inner Belt to Lechmere. The present plans do not make these connections. If the proposed Yard 8 location for maintenance and storage facility is "dropped", better routes for the Community Path (such as along the Green Line to Brickbottom and over the former Red Bridge location) that do make these connections are possible. The Green Line extension plans should state that this re-evaluation will be done.

B. PROPOSED GREEN LINE MAINTENANCE AND STORAGE (SUPPORT) FACILITY

I-231-013

In addition to the specific facility location issue, there are other troubling issues that relate to the provision of this new support facility within the Green Line Extension project:

- Double the number of green line train cars than are necessary for the extension are being planned for the support facility. This adds costs as well as impacts because of the increase size of the storage facility.
- The provision of additional repair capabilities in the support facility than are really necessary (also increasing costs).
- The further concentration of existing rail and rail support facilities in Somerville that will significantly negatively impact economic development possibilities.
- The various support facility reports purport to show that the 10-11 acre design is very reasonable considering that other light rail support facilities around the country are all larger. This analysis ignores the fact that all these other facilities are in outlying areas of the light rail

I-231-009

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. A pedestrian bridge is proposed to Gilman Square Station as part of the Cummunity Path Project to be constructed by others.

I-231-010

For safety reasons, the MBTA, the future owner and operator of the Green Line Extension, has required that this portion of the Green Line be entirely separated from vehicular, pedestrian, and bicycle traffic. This separation would not allow at-grade track crossings for pedestrians and/or bicyclists at any point. Plans for Lowell Station and the Community Path connection will be further refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the design process for stations, trackways, and the Community Path.

I-231-011

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path. Cost for the cummunity path is presented in Section 3.8.1 of the DEIR/EA.

I-231-012

MassDOT is committed to completing all planning, design, and

system where there is available, low value property. Placing this facility in the urban core is already a poor choice for location.

While these design requirements are understandable from the MBTA's perspective they ignore the many negative aspects. Seeing that they are likely to become reality, the consideration of their impact on Somerville's economic future must be taken very seriously in order that the impacts be minimized or mitigated through design changes (smaller footprint) and location selection.

The Support Facility location

I-231-014

The preferred Yard 8 location for the Green Line Extension support facility may be understandable from the MBTA's point of view but it is an economic disaster for the future of Somerville (and immediately for the Brickbottom community because of the construction and operation noise impacts). This is because it will continue the isolation of the Inner Belt area and prevent the economic redevelopment that Somerville and the region greatly needs. Yard 8 will prevent east-west access from Joy St. and use land with a higher development potential.

Since there are other alternatives that "work" for engineering and operational needs and which are also cost-effective, the Yard 8 location should be dropped as the preferred location and the Mirror H and Option L alternatives should be studied further as follows:

I-231-015

Mirror H - The Mirror H option along the Somerville/Cambridge border between NorthPoint and the commuter rail facility (BET) is significantly better than Yard 8. However, some stakeholders in Cambridge oppose because they feel it will compromise the NorthPoint development. This possible drawback can be minimized by moving the facility further east to the Charlestown bridge and under the Big Dig entrance and exit ramps as shown in the attached drawing and Google map: http://tinyurl.com/ybyrtxt

Option L - The recently studied Option L is across (west) the "Valley" tracks from the BET facility. While this option is also much better for Somerville than Yard 8 in many aspects, it still requires taking taxable property that is in active commercial use. It also increases even further the use of Somerville land for rail facilities. Taking this property also makes this option an expensive one.

I-231-016

Option L BET - So I would like to propose a new option - "Option L BET" - a plan that solves many of the problems with the other options for Somerville and for other parties as well. Basically it moves the Valley tracks so that the Green Line maintenance facility is on the existing BET property, thereby not requiring the expensive of taking of taxable properties. In my written submission, I've included color copies of my proposed design for MassDOT to consider as an alternative option. It can also be seen in the following link to a Google map (not every detail is seen in the printed image, so please go to the Google map to move around and zoom in):

http://tinyurl.com/y8hptp9

Advantages of this Option L BET (not in any priority):

- not next to Brickbottom
- not in Yard 8 so future street connections to Inner Belt can be made from Joy St. across/under the new Green Line tracks
- doesn't use any of NorthPoint development land (unlike like Mirror H)

engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension. The connection from Brickbottom to the southern tip of Inner Belt Road is feasible regardless of the maintenance facility option chosen.

I-231-013

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension. Some additional capacity is provided for future system

I-231-016

- much of the 8 acres land is already owned by the State (no private, existing buildings to be taken – only some slivers of land need to be acquired)
- 4 acre support facility Site
- 60,000 SF support facility building
- only small takings of taxable Somerville land
- 4 acre storage facility for 80 light rail vehicles
- Green Line extension tracks don't have to cross the Valley tracks, only the Fitchburg line
- 2-track connection from Grand Junction to Valley track can be used by CSX until some future date when not needed and be converted into 2-way Urban Ring route (35' width)
- leads from Union Square branch as well as Medford branch go directly to storage tracks and the Support facility so that vehicles from both branches can access it without reversing directions (no other option had this)
- Doesn't impact future North-South rail link northern portal (like Mirror H might)
- Saves ~ $50 million to buy the 2 buildings to be taken in Option L.
- My cost estimate for this Mirror L BET is $100 million (possibly less – see 3rd bullet) as follows:
  - Real estate acquisition: $5 million (VHB used $8 million for the North Point land acquisition)
  - Building: $38 million (VHB's amount for every option)
  - Structured/roof parking: $13.5 Million (150% of the high end range of structured parking cost estimate of $25-30,000 per space, 300 spaces). *NOTE: this cost could be saved by using numerous surface parking lots.*
  - Track: $33 million (same as VHB's estimate for Option L)
  - Infrastructure: $3 million (this is the maximum used by VHB of the 3 options)
  - Earthwork: $5 million (same as Option L)

Using the Table 4-1 rating system in the 12/9/09 report on the various support facility options, I get a score of +1 (compared to 0 for Yard 8, -3 for Mirror H and 0 for Option L).

I also show a location for an Urban Ring bridge can also be used for Community Path and (if desired) street access from Inner Belt to Cambridge

Another possible trackage change (though somewhat independent of the support facility location proposal) is to provide a new connection for Pan Am (B&M) trains to the NH Line from the Lowell Line instead of the northern track (Lead 10) that the present plans include. This also means that the Lead 10 (which also divides Inner Belt) can be abandoned. This should also be studied.

Please direct MassDOT to study this Option L BET alternative.

OTHER ISSUES

I-231-017

Maintenance and Storage Facility - Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston needs to be phased out and a new facility built south of Boston to eliminate the unsustainable and unjustifiable shuttling of trains through Cambridge.

I-231-018

Public Participation - Commit MassDOT to a collaborative public process for the next phase that would provide oversight and station area participation and develop a process for addressing

growth. The Option L location abuts BET to minimize impacts to future Inner Belt redevelopment.

I-231-014

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-231-015

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-231-018 mitigation concerns. A project-wide Citizens Advisory Group should be maintained throughout detailed design, engineering, construction and start-up phases with smaller local advisory groups established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues.

I-231-019 McGrath/O'Brien Highway (Route 28) - Coordinate the Green Line extension with calming of the McGrath/O'Brien Highway in Cambridge & Somerville.

I-231-020 Medford Branch Terminus - Design and construct the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project. I don't see any economic sense in doing this in 2 phases. It only creates a risk that it will never be extended to Route 16. The terminus at Route 16 should incorporate MGNA's ideas for minimizing takings.

I-231-021 Union Square Branch –Union Square would be better served with the loop option that would bring trains directly into the square and allow for stops along Somerville Ave. Also, this would need only a single track along the narrow Fitchburg line right-of-way. As I understand that not many others strongly agree with me, the location of the Union Sq. station on the Fitchburg line must be designed with easy, friendly and clear access to Union Square for all uses.

I-231-022 Commuter Rail interchange - The DEIR does not provide for the important connection between the Green Line extension and the Lowell commuter rail line. The fallback to this is to provide a path along the Lowell tracks from the Route 16 station to West Medford for the 8 minute walk. Please request that MassDOT perform this design.

I-231-023 Lechmere Station - Design for the relocated Lechmere Station should pay particular attention to the East Cambridge Planning Team's pedestrian-friendly area design ideas and old Lechmere Station re-use suggestions. Route 28 should be depressed for a short section at the station (like Massachusetts Ave. at Huntington, Commonwealth Ave. and Storrow Drive in order to allow for a better pedestrian crossing and to not impede traffic.

I-231-024 Future Stations – Location, track design and construction should enable the addition of future stations between Lechmere and Washington St. at Brickbottom, between Lechmere and Union Square at Twin City plaza, between College Avenue and Route 16, and along a future Green Line extension to Porter Square that could serve both Cambridge and Somerville neighborhoods.

I-231-025 Re-Design of four stations for better pedestrian and bicycle access:

- Washington St. – should be above Washington St. with direct elevator service up from Washington St.

I-231-026
- Ball Sq., Lowell St., and College St. – should be under the bridges with long ADA compliant ramps and elevators, alleviating the need and expense of escalators

In conclusion, while I realize that a 10% design stage cannot contain all the details everyone would like, I feel that your review should address these many necessary improvements in the Final or Supplemental EIR in order to achieve a first class transit system.

Thank you very much for considering these comments.

Sincerely,

Alan Moore
23 Cherry St.
Somerville, MA 02144
23cherry@gmail.com

I-231-016

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

A detailed response to the "Mirror-L" storage and maintenance facility concept is included in the Appendices to the FEIR. An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-231-017

The Boston Engine Terminal (BET) and its operations are beyond the scope of the Green Line Extension Project.

I-231-018

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-231-019

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to

ensure, to the extent feasible, consistency with planning and other projects.

I-231-020

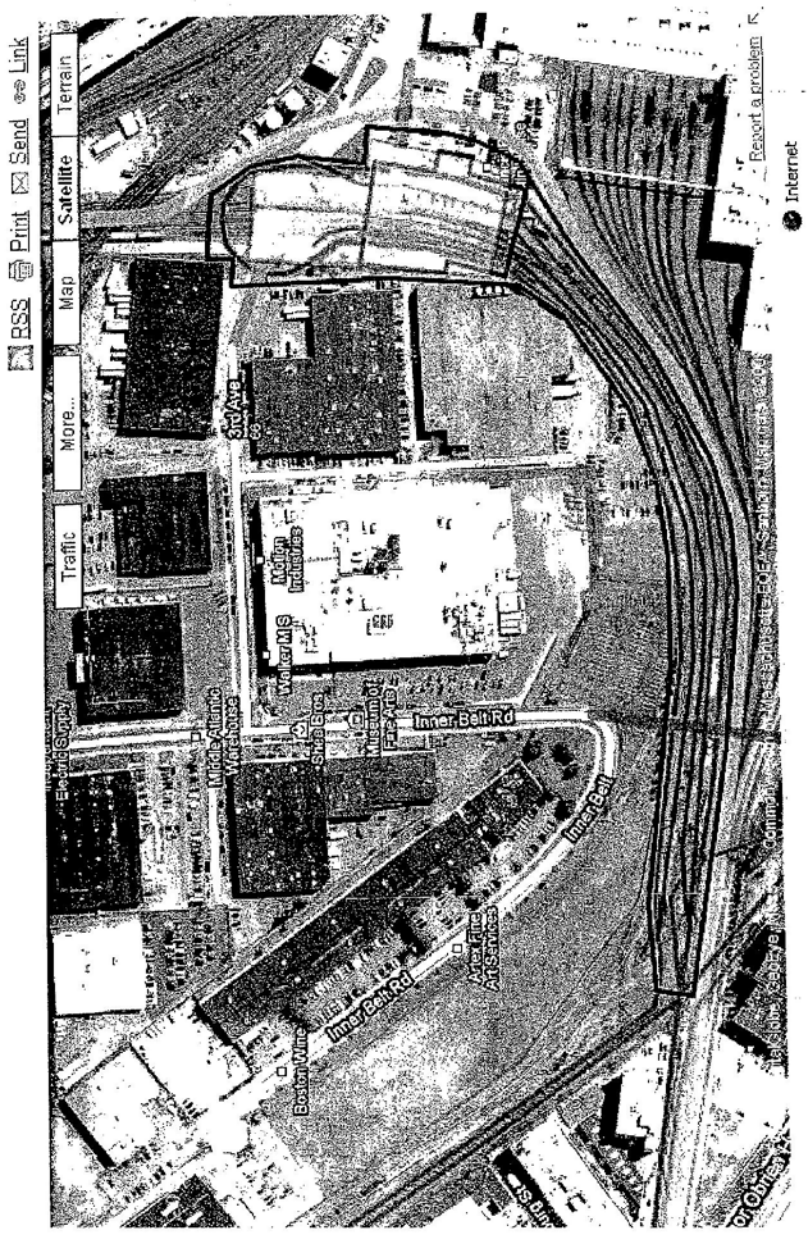
As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

I-231-021

Alternatives considered for the Union Square Branch are detailed in Appendix B of the DEIR/EA. The Fitchburg railroad corridor alignment was determined to be the most feasible. The property impacts and the traffic impacts for the Somerville Ave. loop alternative made it an undesireable option. The Fitchburg corridor is able to support the souble-track configuration within limited property impacts.

I-231-022

Opportunities for a shared station between the Green Line Extension (on the Medford Branch) and MBTA Commuter Rail were evaluated for the Project. This connection was ultimately dismissed, as described in DEIR/EA Section 3.3, and Appendix B. While the potential for a joint



OPTION 1 - RET with roof top parking

station at Union Square would need to be studied further, it is not currently part of the Proposed Project. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain. However, as the Project advances into preliminary engineering, opportunities for future additions and extensions of service will be considered.

I-231-023

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. The conceptual design does not include a grade separation of Route 28/O'Brien Highway. MassDOT intends to demolish the existing station and prepare the site for future reuse. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement throughout the Project design process.

I-231-024

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

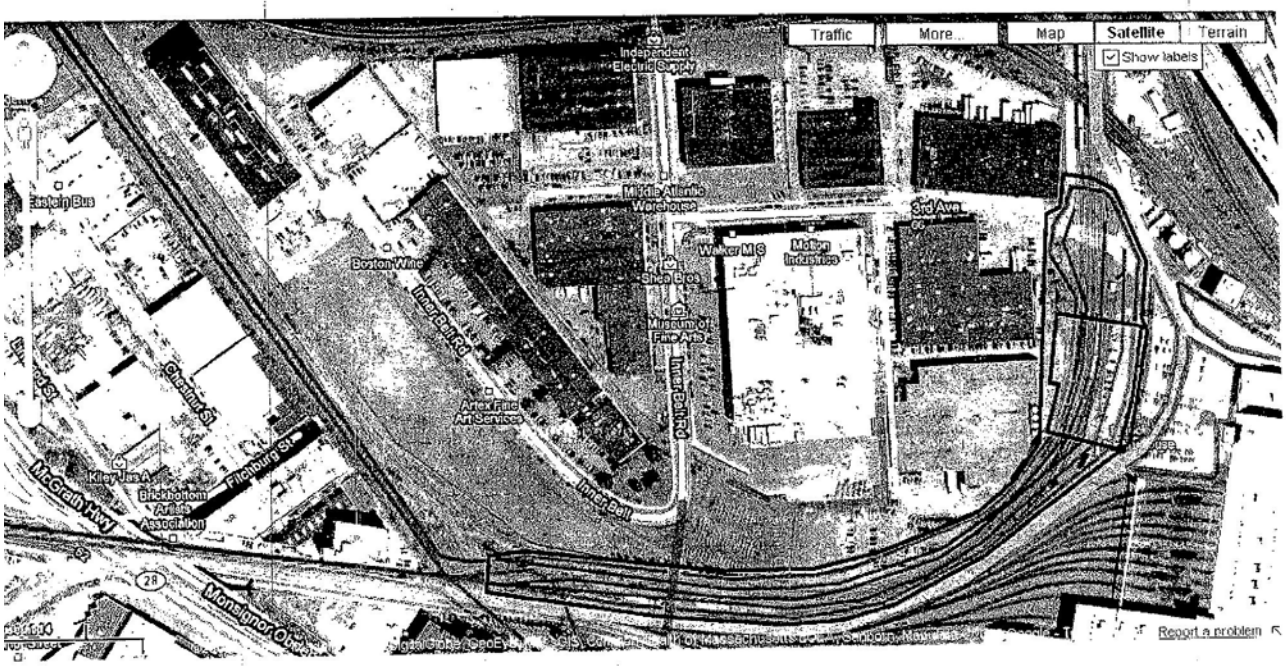
I-231-025

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-231-026

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

Proposing a platform over or under an existing roadway would require two headhouses. Each headhouse would require stairs, escalator, and redundant elevators resulting in station costs that approach twice the cost of the current station designs with marginal benefit to the Project.



OPTION L-BET with surface parking

Johnson, Holly (EEA)

From: Steve Mulder [smulder@rcn.com]
Sent: Thursday, January 07, 2010 10:32 PM
To: Johnson, Holly S (ENV)
Cc: Fichter, Katherine (DOT)
Subject: Comments on Green Line DEIR (EEA #13886)

Hi -

I'm very happy to submit comments on the Green Line DEIR, a critical document that represents a huge step forward for this important project. Though I know you get a ton of complaints about the DEIR, I applaud everyone involved in producing it. While there are items that need fine-tuning, the overall direction of the Green Line Extension is excellent, and I am among thousands who can't wait for the end of 2014.

I'll try to be succinct in my comments, since you're likely hearing many of these from others as well. But because it's important that we build the Green Line right (we have one chance to do so, after all), I wanted to list my comments below:

I-232-001 For the maintenance facility, thank you for exploring Mirror H and Option L in more detail and for holding the recent hearing. Yard 8 is clearly not going to work, and it's disappointing that it's still being considered. It's too close to Brickbottom and hinders economic development. We already have one wall through that area of Somerville (McGrath); we can't add another. I approve of either Mirror H or Option L, though I urge you to find a way to make them work on as little real estate as possible. I believe Alan Moore has some good ideas about how to make Option L work even better.

Regarding the station locations and designs, a few brief comments:

I-232-002 - Build to Route 16 as part of Phase 1 if at all possible. I'm concerned that if it isn't done all at once, it never will be. I'm also concerned that the New Starts application isn't as strong without the benefits of a Route 16 terminus.

I-232-003 - Don't spend tons of money on elaborate indoor stations with bathrooms, too much space, or even escalators. Simple platforms will work well.

- However, multiple headhouses are critical, especially where pedestrian street-crossings are dangerous. I'm thinking in particular of Union Square, where a headhouse on each side of Prospect St is essential. Make pedestrian access easy to encourage maximum ridership.

I-232-004 - Please also work with the city and MBTA to ensure that streets get reconfigured and bus routes and stops are moved to work efficiently with the new stations. This seems obvious, but it's not clear to me who is responsible for ensuring that this kind of true collaboration actually occurs.

- Bus and car dropoff is good, but no parking at the new stations please!

- Bicycle storage at each station is critical, and there should be plenty of it.

Moving forward, there are clearly issues still to be ironed out, particularly the maintenance facility. I urge you to go with a Supplemental EIR or Addenda to the FEIR for these issues. A separate FEIR would mean delays that are unnecessary at this point. The end of 2014 is approaching fast.

1

I-232-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-232-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-232-003

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-232-004

Current MBTA bus routes are described in DEIR Section 4.5.1, Existing Bus Services, and shown in Figure 4.5-1, Existing and Proposed MBTA

I-232-005

Also, please create a design and build process that allows regular community participation. I would like to see a citizens advisory group that exists throughout the entire process and can work closely with you on design, land use, construction, and mitigation issues.

Thanks for the opportunity to comment and for your hard work.

Steve Mulder
42 Stone Ave
Somerville

2

Bus and Transit System. MBTA regularly evaluates and revises bus routes to accommodate service needs; the most recent evaluation is provided in the MBTA's *Preliminary 2008 Service Plan*. In accordance with the Secretary's Certificate on the DEIR, bus routes in the Green Line Extension service area will be evaluated during the Project's preliminary engineering phase. MassDOT will coordinate with MBTA and the Green Line Extension Advisory Group to consider modifying routes to improve access to Green Line Extension stations and maximize bus and rail ridership. Convenience and accessibility of the bus/rail transfer points will also be considered.

The Project is intended, in part, to relieve traffic congestion, as described in DEIR Chapter 2, Purpose and Need. Some station access points for parking or passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR Section 5.5, Traffic. These impacts will be minimized to the extent practical during preliminary engineering, which will be conducted in concert with the local communities. The Public Involvement Plan, Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and neighbors to address traffic and parking concerns.

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-232-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green

Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

The Executive Office of Energy and
Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114



January 3, 2010

Dear Secretary Ian Bowles,

I-233-001

I write to you with great concern regarding the DEIR for Project EEA #13886, specifically the report on the Maintenance Facility and Storage Yard alternatives, and the impact that choices regarding these could cause to the community of individuals and families that lives and works in the Brickbottom Artists complex. I appreciate that you have invited our opinions, but I do appeal to your commitment to creating an optimal environment for all citizens concerned, as you consider the impact of the choices at the heart of the DEIR.

The Yard 8 alternative is deeply disturbing to me personally as a 16-year resident of Brickbottom. I am a Clinical Psychologist, employed part-time by Boston College. I am also an artist. I collect disability benefits for handicaps due to Multiple Sclerosis, and I live on very limited means. With great effort I have been able to pay off my mortgage, knowing that I am on the brink of being totally disabled and unable to work to support myself. I am 50 years old, and I am frankly frightened at what is at risk if the security of my home and quality of life at Brickbottom are threatened—which I feel they most certainly are by the actions and priorities of the DOT.

I moved to Brickbottom in 1993, after a crippling MS attack which precluded living any longer in my fourth-floor walk-up apartment in Boston. I was and still am lucky to have found Brickbottom. It is a place where I have both affordable and handicap-accessible housing, and where I am close enough to public transportation, medical facilities and other conveniences which I require. Brickbottom also, very significantly, offers a rare community-living setting, with a rare urban garden courtyard, and a rare collection of highly talented and diverse inhabitants. The place is a bright patch of life in the neglected end of Somerville, a city which itself is easily seen as Boston's neglected neighbor.

I am very pleased that the MBTA green line will be extended through Somerville. I understand that sacrifices must be made. I understand there is no ideal solution for where to locate the needed maintenance facility. However, I am worried about the trashing of my environment and home that II believe will be caused by locating the maintenance facility at Yard 8.

I trust you have received letters from my neighbors underscoring the economic losses that Somerville will take by locating the facility at Yard 8. For us as individuals at Brickbottom, it is frightening to consider the loss of value in our homes that will occur. It also seems shortsighted to jeopardize the economic potential of this area, just as it is becoming timely.

At Brickbottom we already live surrounded by waste and pollution, literally: from the highways (28 and 93), from the various train rails running by Brickbottom, from the waste transfer station, and from the other industrial operations adjacent to us. I really don't know that residents could tolerate the introduction of new and greater toxins to our living space that will be unavoidable with a maintenance facility next door. It would be home-taking on a huge scale to locate the maintenance facility adjacent to Brickbottom.

Brickbottom residents have been active from their start (in 1988) in contributing to Somerville and to our neighborhood. We have added to the value of Somerville, largely through the generous personal

I-233-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

• Page 2 January 3, 2010

efforts of our residents. Culturally, environmentally and educationally, Somerville is a better place for the existence of the Brickbottom community. I am concerned that a decision to locate the maintenance facility at Yard 8 will be made expeditiously, and heedless of the talent "trust" that exists at Brickbottom. It would be a terrible waste.

I-233-002

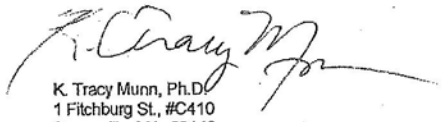
The standards of the Mass DOT (see the Secretary's Certificate EENF Environmental Justice, pg 7) state: "no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts". The Brickbottom community includes at least two dozen children, as well as 220 residents. Among these 220 residents are individuals living below the poverty level, elderly persons and disabled persons. Many minority populations are represented here.

I grant that I am not privy to all the factors at play in the DOT's decision-making, but I cannot help but wonder: what exactly are the competing values at hand here? Why is there not greater concern about wasting what is so hard to come by in terms of community and human capital. And where does fairness count? There are two other sites under question for the maintenance and storage facility (besides Yard 8). I plead with you to make certain that all options are examined honestly and with diligence.

This is a time to be truly thoughtful of the resources at hand and at stake, and how best to sustain them.

Thank you,

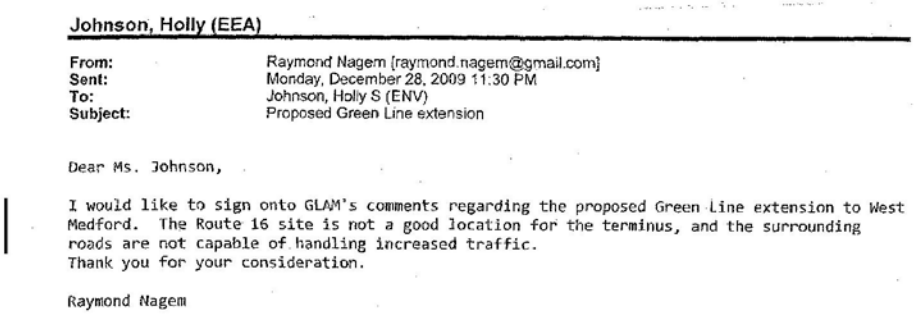
Sincerely,



K. Tracy Munn, Ph.D
1 Fitchburg St., #C410
Somerville, MA 02143

I-233-002

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.



Johnson, Holly (EEA)

From: Raymond Nagem [raymond.nagem@gmail.com]
Sent: Monday, December 28, 2009 11:30 PM
To: Johnson, Holly S (ENV)
Subject: Proposed Green Line extension

Dear Ms. Johnson,

I-234-001

I would like to sign onto GLAM's comments regarding the proposed Green Line extension to West Medford. The Route 16 site is not a good location for the terminus, and the surrounding roads are not capable of handling increased traffic.
Thank you for your consideration.

Raymond Nagem

I-234-001

As described in DEIR/EA Section 3.7, Build Alternatives, although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. The Proposed Project, with a terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Additionally, FEIR Chapter 4 includes a detailed description of College Avenue Station functioning as a terminal station.

Johnson, Holly (EEA)

From: Raymond Nagem [nagem@engc.bu.edu]
Sent: Tuesday, December 29, 2009 10:43 AM
To: Johnson, Holly S (ENV)

Dear Ms. Johnson,

I-235-001

I am writing to express my opinion on the Draft Environmental Impact Report for the Green extension project. As a resident of Medford who lives very near to the proposed Route 16 site, I am strongly opposed to the extension of the Green Line past College Avenue. I support the Green Line extension to Ball Square and Tufts University, but the proposed extension to Route 16 will have very negative effects on traffic congestion, quality of life for residents, and environmental health and safety. I agree with the City of Medford's request that the DEIR should be sent back for further study, and that the Route 16 site should be eliminated from the Green Line extension project.

Sincerely,

Raymond J. Nagem
9 Norton Ave
Medford, MA 02155

I-235-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Shriram Nallamshetty [nallams1@gmail.com]
Sent: Wednesday, January 06, 2010 10:08 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension project
Attachments: Nallamshetty Glass_F_T_letter_1-6-10.doc

Hello,

I am a resident of the Glass Factory Building and have several concerns about the green line extension project. Please find enclosed a letter outlining my concerns with the current MBTA Green Line Extension plan.

Please do not hesitate to contact me if there are any questions or concerns.

Sincerely,

Shriram Nallamshetty
617-494-8182

Shriram Nallamshetty
169 Monsignor Obrien Hwy
#Unit 405
Cambridge, MA 02141

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-236-001 I am an owner and resident at the Glass Factory building. I am writing to express my concerns about the Green Line Extension Project. We live on the 4th floor on the side of the building facing the MBTA property. There are several aspects of the proposed plan that are very concerning. The current proposal calls for the tracks to run approximately 30 – 50 feet away from the building, which will have a severe negative impact on our residence. The existence of elevated tracks and associated train/bus station will obscure light to our unit and clearly create extreme noise and vibration problems secondary to the constant flow of trains and buses in such close proximity to our building. The DEIR

I-236-002 lists us as being severely impacted as a result of these issues. I am also very concerned about safety issues, given the proximity of our residence to a high traffic area. The combination of these issues will also affect the property value of the unit, and many of us are likely to have significant decline in property values.

I-236-003 The T currently does not have a comprehensive plan to address these issues. The current proposal does not afford adequate space to build a barrier wall, severely limiting the prospects for meaningful sound mitigation. It is important that the MBTA do everything possible to address these issues. This includes considering the possibility of running the T tracks at ground level at an adequate distance away from the building and having the bus depot remain on Obrien Highway. Unless these issues are addressed in

I-236-004 detail, they will severely impact the daily lives of the current residents. In addition, I strongly oppose the construction of a new maintenance facility behind our building. The existing noise and light are already a current issue, especially on the existing MBTA property. In addition, putting the Mirror H Option behind our building will effectively destroy any further development in North Point. Given this, I support option L as a better choice.

I-236-005 There are several other major issues. First, the proposed station is not of adequate quality for our neighborhood. This will affect existing property values. Next, there is not adequate trees and greenery. The existing trees have served as a nice barrier behind our building. Adding more parking (i.e. the corner of East Street & O'Brien should not be surface parking) and eliminating the trees will exacerbate this problem.

I-236-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-236-002

No additional traffic related to the project is anticipated in the vicinity of Lechmere Station. Traffic related to parking or pick-up/drop-off activity already occurs today. The proposed project includes an additional signalized pedestrian crossing directly in front of the Glass Factory building; providing an alternate connection to the East Cambridge neighborhood for both MBTA users and residents of the Glass Factory.

I-236-003

Revised conceptual plans for Lechmere Station, including connecting track structures, bus facilities, bus waiting areas and proposed mitigation measures are included in FEIR Chapter 5, Lechmere Station. These plans will be further refined in the preliminary engineering stage of the Project. In accordance with the Secretary's Certificate on the DEIR/EA, the FEIR includes only conceptual station designs and station design criteria. The Public Involvement Plan, Chapter 6 of the FEIR, proposes a structure for community involvement throughout the station and trackway design process.

I-236-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the

I cannot emphasize enough my concerns over the existing MBTA design for the T station and line (tracks and buses). I implore you to deeply consider our concerns as this will have a major impact on our current quality of life.

Please feel free to contact me if there are any additional questions.

Sincerely,

Shriram Nallamshetty
Phone 617 494 8182

evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-236-005

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

Johnson, Holly (EEA)

From: Bob Nesson [bnesson@nessonmedia.com]
Sent: Monday, November 16, 2009 1:00 AM
To: Johnson, Holly S (ENV)
Cc: Wig Zamore; Ellin Reisner
Subject: Somerville Green Line - route comments

Dear Ms. Johnson,

I-237-001

I'm writing to recommend that the proposed Green Line route to Union Square be extended to Porter Square to link with the Red Line and commuter rail at that station. My preferred option would be to place it directly down Somerville Avenue, where it would provide connectivity and convenience for thousands of people living along that densely populated right of way. The visibility and accessability of a true streetcar, running frequently and providing reasonably fast connections with the rest of the system would be a strong draw to get people out of their cars.

Further, this routing would provide an economic stimulus to the businesses along this highly travelled route. People living in adjacent neighborhoods would naturally flow down to Somerville Avenue, with the incentive the streetcar provides.

One has only to study the success of the existing Green Line routes down Beacon Street and Commonwealth Avenue to see how the model works
-- or look to cities like Portland or Denver to see how with a little vision you could have a first class transportation system.

A spur line that merely shuttles back and forth between Lechmere and Union Square is a start, but makes little sense in the long term and would be hard to justify except as better than nothing, perhaps.

Best,

Bob Nesson
Filmmaker

Nesson Media Boston, Inc.
1300 Soldiers Field Road, Suite 4
Boston MA 02135
617.869.8267
bnesson@nessonmedia.com
www.nessonmedia.com

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I-237-001

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

Johnson, Holly (EEA)

From: jpokeefe@gmail.com on behalf of Jamie O'Keefe [jokeefe@jamesokeefe.org]
Sent: Thursday, January 07, 2010 10:00 AM
To: Johnson, Holly S (ENV)
Subject: RE: Green Line Extension Draft EIR (EEA #13886)

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

I strongly support the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville and believe its positive environmental impacts greatly exceed the potential negative impacts. However, I cannot support the Draft EIR because of various shortcomings and omissions in the design.

I will be submitting my comments on the design and the Draft EIR in more than one letter, this one concentrating on the extension of the Somerville Community Path and bicycle and pedestrian issues. Thanks you very much for considering these comments.

First the main points on Design, Funding and Construction (followed by details):

I-238-001
- I think that the Community Path design from Lowell St. to Washington St. as shown in Appendix E of the DEIR is excellent. Its implementation will be a great benefit for the Green Line and its ridership as well as an asset to Somerville and the region. As the location of the support facility is finalized, the route of the Community Path from Washington St. to Lechmere in Cambridge should be re-evaluated.

I-238-002
- The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the EOT.
- That for cost efficiencies and technical necessities, the Green Line and Community Path extensions will be constructed as one project and must clearly be described as such by MassDOT.
- MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding for allowed bicycle and pedestrian access costs.

I-238-003
- The planned amount of bicycle parking is insufficient and pedestrian connections to some of the stations could be better designed. Also, the DEIR does not show at all how bus connections will be made to the new stations. I look forward to those improvements during the final design process.

Now the details:

I-238-004
Funding and the Importance of the Community Path – If funding is not available at the right time such that the Community Path can be constructed along with the Green Line, it likely will never be built as it will cost many times more to construct it as a separate project. The City of Somerville has about $3 million for the $15 - $20

1

I-238-001

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-238-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-238-003

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR,

million Community Path extension estimated cost. The reasons that I feels that this request for State and Federal transit funding is reasonable and appropriate are as follows:

- The Community Path will provide desirable off-road bicycle and pedestrian access to the stations, offering superior connections to the neighborhoods (like in Davis Sq. where 60% of the residents use public transportation and thousands walk and bike to the station each day), thereby attracting more riders in a very cost-effective manner. More riders means a greater change of getting federal New Starts funding.
- In the vicinity of Lowell St., Gilman Sq. and Washington St. stations, the Community Path is in integral part of the station access, allowing the Davis Square station success to be replicated.
- The only way the Path can realistically be constructed is together with the Green Line extension.
- Many other amenities not absolutely needed for the Green Line extension have been included (car drop-offs, redundant elevators and escalators, storage for twice as many Green Line cars as necessary, station fare collection rather than on-board, etc.) So its also reasonable that Community Path costs also be included.
- The FTA has recently proposed a policy that "pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop ... may be eligible for FTA funding" http://edocket.access.gpo.gov/2009/E9-27240.htm
- There are at least 2 precedents in the Boston area for community paths constructed and paid for by transit projects:
  - The Linear Path over the Red Line Paths with the Red and Orange line extensions that were part of the overall transit construction project
  - The Southwest Corridor Path alongside and over the Orange Line

There are many recent examples around the country of paths being built together with mass transit expansions:

- The Capital Crescent trail alongside the planned light-rail Purple Line in suburban Washington DC includes trail construction is part of the project and the cost estimates that will be submitted for New Starts funding from the federal government.

  http://purplelinemd.com/images/stories/purpleline_documents/deis/deis/10_chapter5.pdf
  http://purplelinemd.com/images/stories/purpleline_documents/deis/Conceptual%20Plans%2009%202008.pdf

- Bicycle and pedestrian path alongside the light-rail Expo line in Los Angeles:

  http://buildexpo.org/gallery.php
  http://metro.net/projects_programs/exposition/feis.htm

- A world-class bikeway was built alongside and integrated with stations on the 14-mile Orange Line BRT corridor in LA:

  http://www.streetfilms.org/las-orange-line-bus-rapid-transit-plus-bike-path/

The Somerville Community Path is a critical piece of the following regional and State-wide bicycle and greenway plans.

- The Massachusetts Bicycle Transportation Plan (page 30 and 45 and Figure 4): http://www.massbikeplan.org/_docs/Massachusetts%20Bicycle%20Plan%20with%20Links%20to%20Graphics.pdf
- The Somerville Community Path as part of the critical 104-mile east-west Mass Central Rail Trail (Figures 4.1 and 4.2): http://www.masscentralrailtrail.org/
- The City of Somerville's Open Space and Recreation plans list the Community Path

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proposes a structure for community involvement during the station design process.

I-238-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

- The Mystic Valley Case Statement for Active Transportation for the Mystic River Communities: http://www.railstotrails.org/resources/documents/whatwedo/case_statements/Vision%20for%20July%2010th%20draft.pdf
- The 2007 MAPC Regional Bicycle Plan - http://www.mapc.org/transportation/trans_alternatives/Bike_plan_PDFs/Bike_Plan_FINAL_version_3-14-07.pdf

I-238-005 Community Path from Lowell St. to Route 16: The MEPA certificate said that the environmental review would include evaluation of continuing the Community Path west of the Lowell St. station to Medford. The study results that were presented (Appendix E of the DEIR) concluded that the width of the ROW was insufficient to provide such a continuous Path. However, since there are some sections where there is enough width; a route, perhaps with connection to local streets, should be studied further.

I-238-006 Community Path from Route 16 to West Medford: Section 3.2.3 of the RFP said that VHB should study "*Using the bikeway/pathway guidelines, consider options for providing pedestrian connections to the West Medford commuter rail station and evaluate the viability and potential impacts of including a community path in this section of the project area.*" This seems not to have been done but should be. Such a Path would make a transfer connection from Route 16 to West Medford. Therefore MassDOT should plan for a community path to connect the Route 16 terminus to West Medford via an overpass of Route 16, a bridge over the Mystic River and a route along the Lowell commuter rail tracks.

I-238-007 Access to Route 16 Station - The plans in the DEIR document do not show how Green Line riders will safely access the Route 16 station from Arlington and Medford and from the Alewife Brook paths that are being improved as part of a $3.6 million ARRA stimulus project. A multi-use path for pedestrians and bicyclists to the station should be included in the design from the Alewife paths to the station. Please request that MassDOT perform this design.

I-238-008 Bicycle Parking - The amount of bicycle parking presently described in the plans (270 spaces) is very welcome but will be insufficient for the expected number of bicyclist coming to the stations. 270 spaces is only about 1% of the expected ridership. Based on the present parking at Red line stations, bike parking at 3-5% of ridership will soon be needed. Therefore I request that the amount of bike parking be increased to approximately 5% at the Union Square, Route 16 and Lowell St. (major intersection with Community Path) stations and 3% at the remainder. Also, the location of the bicycle parking (where specifically shown in the plans) are good at some locations but not at others. The bicycle parking locations should be as close to as possible to the entrance and in well lit and safe locations. Lastly, bicycle parking should be covered if at possible.

I-238-009 Improved pedestrian and bicycle access – access could be vastly improved at some of the stations by having more than one entrance or access point such as:

- a direct connection from the Gilman Square station to the Somerville High School/Library/City Hall complex)
- the Washington St. station design which seems particularly poor in this regard for riders coming from the west and north. This could be greatly improved by locating the station directly above Washington St. where direct access via elevator would be possible (earlier designs included such a layout).
- station designs (specifically College Ave and Washington St.), where drop-off (kiss and ride) stops are directly in front of the entrance while pedestrian access is a long and involved route.
- Lowell St. station where a direct connection to the platform from the Path coming from Cedar St. would be possible via a safe crossing of one track. MassDOT has said this would not be allowed because of safety concerns even though every light rail system in the US (including in Boston – see the Longwood stop on the Green Line and stops on the Mattapan line) allows crossing of tracks for access. There s Even if MassDOT will not allow this access point at this time, the Lowell St. station platform should be designed for such future access.
- In general, pedestrian and bicycle access should be given higher priority in these "community-based" station designs that motor vehicles connections.

I-238-010 Community Path costs -- I understood that the marginal (extra) costs for constructing the Community Path between the stations was to be provided but I don't see them in the DEIR. They should be provided.

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I-238-005

DEIR/EA Section 3.8.2 and Appendix E include an analysis of this potential community path connection to Medford. As presented in the analysis, a community path along the Green Line Extension Medford Branch corridor north of Lowell Street Station is not viable due to right-of-way constraints. The analysis also concluded that adjacent Boston Avenue has insufficient pavement width for a community path or on-street bicycle lanes.

I-238-006

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-238-007

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout and access at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-238-008

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed

I-238-011

Community Path Route from Washington St. to Lechmere - the Somerville Community Path route should connect the Washington St./Brickbottom station, the Brickbottom community and Inner Belt to Lechmere. The present plans do not make these connections. If the proposed Yard 8 location for maintenance and storage facility is "dropped", better routes for the Community Path (such as along the Green Line to Brickbottom and over the former Red Bridge location) that do make these connections are possible. The Green Line extension plans should state that this re-evaluation will be done.

In conclusion, while I realize that a 10% design stage cannot contain all the details everyone would like, I feel that stating these many improvements is necessary for the final EIR and the subsequent final design in order to achieve a first class transit system.

Thank you very much.

Sincerely,

James O'Keefe
25 Moore St.
Somerville, MA 02144
jokeefe@jamesokeefe.org.

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bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-238-009

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

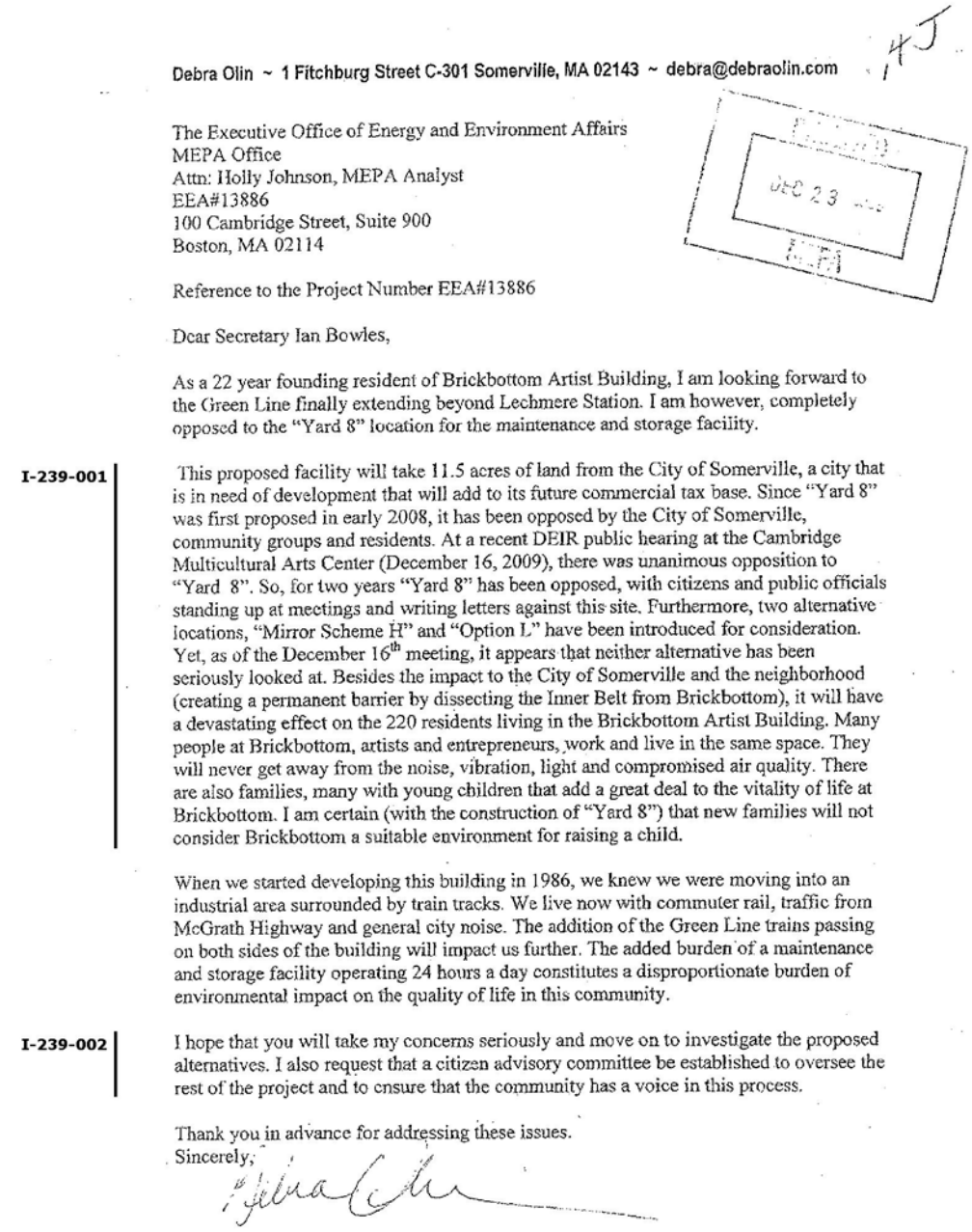
I-238-010

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road

and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-238-011

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.



Debra Olin ~ 1 Fitchburg Street C-301 Somerville, MA 02143 ~ debra@debraolin.com

4J

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

DEC 23

Reference to the Project Number EEA#13886

Dear Secretary Ian Bowles,

As a 22 year founding resident of Brickbottom Artist Building, I am looking forward to the Green Line finally extending beyond Lechmere Station. I am however, completely opposed to the "Yard 8" location for the maintenance and storage facility.

I-239-001 This proposed facility will take 11.5 acres of land from the City of Somerville, a city that is in need of development that will add to its future commercial tax base. Since "Yard 8" was first proposed in early 2008, it has been opposed by the City of Somerville, community groups and residents. At a recent DEIR public hearing at the Cambridge Multicultural Arts Center (December 16, 2009), there was unanimous opposition to "Yard 8". So, for two years "Yard 8" has been opposed, with citizens and public officials standing up at meetings and writing letters against this site. Furthermore, two alternative locations, "Mirror Scheme H" and "Option L" have been introduced for consideration. Yet, as of the December 16th meeting, it appears that neither alternative has been seriously looked at. Besides the impact to the City of Somerville and the neighborhood (creating a permanent barrier by dissecting the Inner Belt from Brickbottom), it will have a devastating effect on the 220 residents living in the Brickbottom Artist Building. Many people at Brickbottom, artists and entrepreneurs, work and live in the same space. They will never get away from the noise, vibration, light and compromised air quality. There are also families, many with young children that add a great deal to the vitality of life at Brickbottom. I am certain (with the construction of "Yard 8") that new families will not consider Brickbottom a suitable environment for raising a child.

When we started developing this building in 1986, we knew we were moving into an industrial area surrounded by train tracks. We live now with commuter rail, traffic from McGrath Highway and general city noise. The addition of the Green Line trains passing on both sides of the building will impact us further. The added burden of a maintenance and storage facility operating 24 hours a day constitutes a disproportionate burden of environmental impact on the quality of life in this community.

I-239-002 I hope that you will take my concerns seriously and move on to investigate the proposed alternatives. I also request that a citizen advisory committee be established to oversee the rest of the project and to ensure that the community has a voice in this process.

Thank you in advance for addressing these issues.
Sincerely,

I-239-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-239-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

HD

125 Boston Avenue
Somerville, MA 02144-2218
November 19, 2009

RECEIVED
NOV 23 2009
MEPA

Executive Office of Energy and
Environmental Affairs MEPA Office
Attention Holly Johnson, MEPA Analyst EEA#13886
100 Cambridge Street, Suite 900
Boston, MA 02114
E-Mail Holly.S.Johnson@state.MA.US

My name is Kevin F. Oliver. I live at 125 Boston Avenue, Somerville, MA right next to the Commuter Rail Corridor for the proposed Green Line Extension, close to Ball Square.

I would like to make two general comments and one specific comment concerning the home we own on Boston Avenue.

GENERAL COMMENTS:

I-240-001 (1) The proposed extension of the green line has one major problem that must be addressed if it is to be a success--the fixing of the Central Tunnel through Boston. Currently during peak periods, the present configuration produces gridlock from North Station through Kenmore Square in both directions. How can we possibly add more than 60 vehicles going through the Central Tunnel without gridlock all day??? The MBTA needs to either fix the Central Tunnel (very costly) or find another alternative.

I-240-002 One possibility would be to extend the Blue Line from Bowdoin through North Station to Lechmere and beyond. The advantage to this plan would be the balancing of the Blue Line with its sole easterly stops with new westerly ones, provide rapid transit extension that could eventually carry a load sufficient to reach 128, and prevent any gridlock within the Green Line system.

I-240-003 (2) If the state determines that it must continue with the current Green Line plan, it should scale back phase I so that the extension terminates just before Cedar Street with a stop there. This would allow Somerville to receive 90% benefit of the extension without having to rebuild the bridges at Cedar, Ball Square, Harvard Street, College Avenue and the tracks between these points. The cost would be dramatically reduced. This alone would allow the state to build out the project by the December 2014 deadline. Medford, who has mixed feelings about the project, would be taken out of the equation. The only reason the project is proposed to end at College Avenue on its first phase is Tufts University's desire to have a direct transportation connection to its downtown medical facilities. Tufts can use other means to achieve this goal; they currently run a private bus service to Davis Square for their staff and students. They could re-route this system so it could

I-240-001

The Green Line Extension does not add vehicles through the Central Subway system. The proposed operating plan extends existing Green Line service at existing headways and frequencies. The D Branch would extend to College Avenue, and the E Branch would extend to Union Square. Therefore, there would be no adverse impact to the Central Subway system.

I-240-002

The MBTA Blue Line is a heavy rail transit service that uses a different transit technology than Green Line light rail. The two technologies are not compatible, in that they cannot operate along the same tracks. A separate Red Line/Blue Line Connector Study evaluates extending the Blue Line to the Red Line at Charles/MGH Station. This analysis is beyond the scope of the Green Line Extension project.

I-240-003

The Project's Purpose and Need is described in DEIR/EA Chapter 2, Purpose and Need. The Project is needed to comply with the State Implementation Plan (SIP), which includes requirements for this Project as well as other transit projects to meet the air quality and transit commitments established as a result of the Central Artery/Tunnel project.

I-240-003

stop at a Cedar Street Station. The commuter rail could stop at Tufts as it has done in the past.

I-240-004

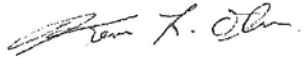
The Community Path could still be built between College Avenue and/or Ball Square to the Cedar Street Station to allow access by foot and bicycle. The current bus routes # 89 and 80 can easily be re-routed to a Cedar Street stop. Franey Road only services the DPW. There is a small playground that could be used for the stop and it could be moved across the street to an empty closed store and parking area. It seems a no-brainer to me if we intend to build this project before 2050. Phase 2 could still include the rest of the project to Route 16 as funds become available.

PERSONAL COMMENTS

I-240-005

As I said earlier, I live at 125 Boston Avenue right next to the current right of way proposed for the extension. I noted on the map shown at the public meeting of November 18, 2009, at Somerville High School that a new retaining and sound barrier is proposed from Ball Square to one house to the north away from my property and a new retaining and sound barrier is proposed from two houses east toward Boston all the way to Cedar Street. Why is there no retaining and sound barrier behind our house??? My wife and I feel that we must have at least some protection from the noise and vibration of the street cars going every 5-10 minutes behind our house. What other mitigations will you provide during construction and afterwards for vibrations, noise, and possible damages to our property?

Kevin Oliver
125 Boston Avenue
Somerville, MA 02144-2218
oliver.massed@rcn.com



I-240-004

DEIR/EA Section 3.8.2 and Appendix E include an analysis of this potential community path connection to Medford. As presented in the analysis, a community path along the Green Line Extension Medford Branch corridor north of Lowell Street Station is not viable due to right-of-way constraints. The analysis also concluded that adjacent Boston Avenue has insufficient pavement width for a community path or on-street bicycle lanes. A station at Cedar Street has not been considered as part of the Proposed Project.

I-240-005

As shown in FEIR Section 5.1, Fig. 5.7-4, a noise barrier is proposed to extend along the entire west side of the alignment, along Boston Avenue between Cedar Street and Broadway. It is important to note that retaining walls, which are required at certain locations to retain the soil along slopes of the corridor, are not necessarily the same locations as proposed noise barriers.

Johnson, Holly (EEA)

From: Chip Olson [ceo@thsi.org]
Sent: Friday, January 08, 2010 3:38 PM
To: Johnson, Holly S (ENV)
Subject: Comments on Green Line Extension DEIR

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to urge that the Draft Environmental Impact Report (DEIR) for the Green Line Extension Project NOT be accepted as the Final Environmental Impact Report (FEIR), for the reasons set forth below.

I-241-001

1. The DEIR must specify the Green Line Extension to Mystic Valley Parkway/Route 16 as a single project. Ending the Extension at College Ave will put a large burden on the Medford Hillside neighborhood, due to greatly increased traffic on Boston Ave, without effectively serving it.
The DEIR fails to properly analyze the effects that ending the Extension at College Ave will ave on Medford Hillside.

2. In addition, MassDOT should re-analyze locating the station at Winthrop Street rather than College Avenue. This location will serve Medford Hillside far more effectively than would College Avenue.

I-241-002

3. The DEIR calls for the taking and demolition of the commercial properties at 200 and 222 Boston Avenue, for the sake of a tiny sliver of space supposedly needed for the track approach to the Mystic Valley Parkway/Route 16 station. The Medford Green Line Neighborhood Alliance has published a proposal for a track and station design that does not require taking those properties, and MassDOT claims to have come up with one as well.
Taking and demolishing those properties would a) be costly to the project, b) deprive Medford of a significant source of property tax revenue, and c) displace several hundred jobs that would otherwise suddenly become a lot more T-accessible.

I-241-003

4. The Mystic Valley Parkway/Route 16 station should include a pedestrian connection to West Medford Square along the Lowell Line right-of-way.
Doing so will make the station far more accessible to residents of West Medford. West Medford Square is a quarter of a mile from the station location in a straight line, but making the trip on foot is nearly twice that distance, and involves a difficult crossing of Route 16. From the Google Maps images, it appears that both the Rte. 16 bridge and the Mystic River bridge have room for a 10'-wide pedestrian path and a suitably beefy fence separating it from the commuter rail tracks.

I-241-004

5. More trivially, "Mystic Valley Parkway/Route 16" is a cumbersome name for the station. I submit "Mystic Valley" or "Mystic River" as alternatives.

I-241-005

6. The extension of the Somerville Community Path alongside the Green Line must be designed and constructed as an integral part of the Green Line Extension project. If this is not done, it will become much more difficult and costly to build the Community Path extension at a later time. The DEIR should include an analysis of the environmental, traffic etc. impacts of

1

I-241-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

As described in DEIR/EA Appendix B, Section 4.5, MassDOT's analysis and understanding of the ridership market potential concluded that the Winthrop Street area would be best served by a single station in the vicinity of College Avenue and Winthrop Street. As explained in DEIR/EA Section 3.7, the preferred station location is at College Avenue.

I-241-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-241-005

the Community Path, particularly in regard to its providing increased accessibility for the Green Line stations.

I-241-006

7. The Green Line Maintenance Facility should not be located at Yard 8, and the DEIR should not call that location out as the preferred alternative. Of the locations currently under consideration, I find Option L the best alternative, despite involving the acquisition of some commercial property.

I-241-007

8. Section 3.7.6 of the DEIR remarks that the Broadway Bridge in Somerville will be closed and detoured during its reconstruction. Based on my experience when the City of Somerville closes that bridge for the Independence Day fireworks at Trum Field every year, I must recommend in the strongest possible terms that, if it is truly necessary to close the bridge, the detour route be carefully thought out and have ample signage. The route most people take eastbound during the closure for the fireworks is Boston Ave to Prichard Ave to Kidder Ave to Boston Ave to Morrison Ave to Cedar St to Highland Ave. Most of these are narrow residential streets, with at least two turns that are impassable for 18-wheeler trucks. And, during rush hour, the traffic light at Highland and Cedar backs up all the way to the north end of Prichard Ave. Willow Ave to Highland Ave to Cedar St is one possible detour, as is Harvard Street to Medford Street (though this route already sees heavy traffic). In addition, careful consideration must be given to the likely impact of the closure on Ball Square businesses. And, needless to say, similar care should be taken for any other bridges that need to be detoured.

Respectfully,
Chip Olson
80 Prichard Ave
Somerville, MA

2

I-241-003

Please see response to Comment I-241-002.

I-241-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-241-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-241-006

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-241-007

Construction impacts of the Project are described in each environmental resource section in DEIR/EA Chapter 5, Environmental Consequences. Detailed construction plans will be developed in the next phase of the Project. Affected bridges are described in DEIR/EA Section 3.7.2. Detour routes and emergency access during construction will be developed during preliminary engineering as part of the Traffic Management Plan. At least one bridge will need to be closed during construction (Medford Street). A temporary bridge may be able to maintain a single lane of

traffic at the Broadway Bridge. For all other bridges, at least one lane will be maintained during construction. Pedestrian and vehicular access to abutting properties will be maintained at all times. Project bridge designs and construction staging plans will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during design and construction.

Jan 3, 2010

From: Jane Owen
1 Fitchburg C-129
Somerville, MA
02143

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles,

Please consider the quality of life the residences at Brickbottom will have to endure - Noise + VIBRATIONS if Yard 8 is approved.

I-242-001

OPTION L is the only solution given the choices, that does not damage the hard work and dedication ~~because~~ put into our community over the past 23 years.

Quality of Life
Quality of Life
Quality of Life

Thank you,
Jane Owen

I-242-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-243-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-243-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Harpreet

Signature

Harpreet Pall

Print Name

Apt 807
Glass Factory

Address

Marilyn Pappas 1 Fitchburg St C415 Somerville, MA 02140

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Reference to the Project Number EEA#13886

Dear Secretary Ian Bowles,

As one of the original artist group that developed the Brickbottom Artists Building at 1 Fitchburg Street, Somerville some 21 years ago, I am both delighted that the Green Line will be extended to Medford and shocked that the DOT would consider placing the Maintenance Facility and Storage Yard, in what is called Yard 8, so close to the Brickbottom Buildings and Inner Belt Area of Somerville. At recent open meetings held by DOT there was almost total opposition to this plan. In addition, there are viable alternatives to this plan. The noise and vibration as well as the negative impact on the further development of this area, would be unfortunate.

I-244-001

I urge you to choose the city's preferred alternative, "Mirror H" and to continue community involvement for this project which will have such a large impact on the lives of those of us who live and/or work here.

I-244-002

Thank you,
Marilyn Pappas
Marilyn Pappas

I-244-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-244-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Piotr Parda
1 Fitchburg St. B258
Somerville, MA 02143

RECEIVED
JAN 8 2010
MEPA

Holly Johnson
MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Green Line Yard 8 Plan

January 6, 2010

Dear Ms. Johnson

I-245-001 I am a Brickbottom resident facing North and East on the second floor. Our unit is level with the ground, and we would be directly impacted by any activity in Yard 8, creating problems of noise, vibration, pollution, and light blockage. What are the plans to address those impacts?

For a number of reasons, the proposed maintenance facility and storage yards are ill advised in this location:

I-245-002 The location would prevent future economic development in the area, which our city desperately needs and deserves, it would create a reckless expansion of the industrial rail zone, instead of combining facilities to reduce impact and quite possibly costs due to potential sharing of equipment and facilities. We know such an expansion would present challenges, but we expect the government to thoroughly explore such avenues, rather than embark on shortsighted solutions.

Sincerely,

Piotr Parda

P. Parda

I-245-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site. Mitigation for the Proposed Project is discussed in FEIR Chapter 8.

I-245-002

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

Johnson, Holly (EEA)

From: Christopher Park [ctpark@gmail.com]
Sent: Friday, January 08, 2010 2:12 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Project DEIR feedback

January 4, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Secretary Bowles,

My name is Christopher Park and I live and own one of the units at the Glass Factory building located at 169 Monsignor O'Brien Highway. While I am enthused about the Green Line project overall, I would like to voice my concerns about the new Lechmere station and the potential effects it may have on our building. Specifically, three areas:

I-246-001

1) **Noise Impact** After reading the DEIR report recently published, I am concerned about insufficient data provided in this analysis. It listed our building as one of the few that would be "severely impacted" by noise. While it is good to see that you recognize the effects of the tracks being so close to our building, the solutions presented in detail to combat noise impact (sound barriers) are not applicable to our building as it has been determined it is not feasible at our location. Therefore, you have individually identified our building as potentially qualifying for "sound insulation". Possibilities listed that are relevant to our building include: extra layer of glazing to windows, by sealing any holes in exterior surfaces that act as sound leaks. However, what concerns me are the following points:

a. You have not taken the time to inspect our building exterior surface (how do we seal holes on the backside of our brick-face building?) so sound insulation may not even be feasible.

b. You list an estimated budget of $50K per unit, but again, have not inspected our building. What is this figure based upon? How did you determine the cost to insulate each unit by window glazing and additional panes? (without any prior knowledge of the window structure)

I-246-002

2) **Parking.** I do not understand why the new Lechmere stop requires as many parking spots as the current station, *when it is no longer at the end of the line*. Having this large lot seems unnecessary because T conductors and bus drivers will not be starting their shift at the Lechmere station. More importantly, it defeats the purpose of having public transportation. In my experience, when public parking is offered, people will use it for a variety of reasons other than its intended purpose. (much cheaper to park here and go to the Museum of Science or TD BankNorth Garden as opposed to their $20+ private lots) As you may already know, there is a major traffic problem where Rt 28 and Cambridge St. merge, and this large parking lot would aggravate to what is already a congested situation. Please reconsider decreasing the size of the lot (reducing the number of parking spots) or allocating smaller parking areas around the East Cambridge area. Large parking areas can be

1

I-246-001

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. The estimated budget of $50K per unit is based on the typical costs per residence for sound insulating single-family and multi-family properties. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-246-002

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-246-002

refuge for the homeless and potential criminal activity at night. This designated space could be used in a more productive manner for retail and commercial businesses – originally slated in the North Point project.

I-246-003

3) **Track and Station Proximity to Building** Finally, I would like to implore you to try to move the station as far away from the Glass Factory building as possible. I realize that due to engineering limitations, a sweeping curve around the building is not possible, but every foot away from our building would help. Even if moved an additional 5 or 10 feet away from our building, it may open the possibility of using a sound barrier wall, along with options for unit owners to retain some of their privacy by having trees planted in between. Again, I am supporter of the Green Line project, but I ask you to take into account the location of the tracks and station on behalf of myself and the other residents of the Glass Factory

Thank you for taking the time to read this letter and if you have any questions or wish for me to elaborate on any point, please feel free to contact me.

Best,

Christopher Park
ctpark@gmail.com
508.254.1464
Trustee and Unit Owner
Glass Factory Condominiums
169 Monsignor O'Brien Highway

I-246-003

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-247-001

Please see Comment Letter I-013.

TAESHIN PARK
169 MONSIGNOR OBRIEN HWY, SUITE 502
CAMBRIDGE, MA 02142

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I-247-001 I am an owner and resident of the Glass Factory Condominiums, and have also been a long time resident of City of Cambridge in the area of East Cambridge since 1991. I have the following concerns about the Green Line Extension Project.

(1) TRACKS ARE LITERALLY NEXT TO OUR BUILDING

The currently proposed design indicates the tracks running extremely close to the rear of our building. Please place the elevated tracks as far to the rear of our building as possible to preserve lights and privacy, and minimize noise and vibration. My unit is located at the back of the building, and will be severely impacted by the elevated tracks if they are too close to our building.

(2) LECHMERE STATION PLACEMENT

The current design indicates the new Lechmere Station will be relocated so close to our building that it appears to be part of our condominium building. It will make much more sense to move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The North Point is an important location as the gateway between Cambridge and Boston, and therefore the Lechmere station design should be substantially enhanced to be a part of this rapidly developing neighborhood.

(3) BUS ROUTE & TRAFFIC

The currently proposed design routes bus traffic too close to our building as if our building is a part of the bus station. I'm greatly concerned about bus traffic noise, vibrations, fumes, and intrusion of privacy by passengers waiting at the sidewalks.

(4) PRESERVE OUR TREES & GREEN SPACE

Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

(5) MAINTENANCE FACILITY LOCATION

I strongly oppose the Mirror H location since it is much too close to our building and other residential buildings and will effectively destroy further development in North Point. I could not understand why a maintenance facility should be placed on this prime land in a desirable, developable location that would generate significant tax revenue to Cambridge. It will make sense to put it at the end of the Green Line not at the Lechmere station. If it is required to put it at the Lechmere station, Option L seems to be the best choice.

I appreciate hearing my concerns.

Sincerely,

Taeshin Park
Glass Factory Condominiums
169 Monsignor Obrien Hwy, #502
Cambridge, MA 02141

Green Line Extension Draft EIR (EEA #13886) January 8th, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

The following three proposals have been identified many times during both several public meetings and in the form of comment letters. The three proposals have been a "common sense" repeated series of suggestions during the many aggregate and "snowballing" series of questions.

ISSUES

The proposals derive from the following three issues. The issues, obviously, require unbundling in a manner beyond the several public comments and responses to date. This is why the following three issues seem to only become more paramount as the Jan 8th date approaches:

I-248-001

1. Public advisory process has been constructive with public comments and MassDOT responses creating a strong "back and forth" narrative. But it is clear some issues are more complicated than the latter process allows for, such as evolving the many desire lines into stations, the inclusion of improvements to the surrounding sidewalks, streets and bus stops, etc.
2. Proposing design alternatives such as the maintenance/support facility, has proven a "good start" at larger public meetings. Then subsequently, trying to create a clear consensus has been harder. For example, the process has cultivated groups being pitted against each other, as they support opposing alternatives. Yet more evolved solutions such as "option L BET" have recently surfaced. But they need more extensive unbundling and collaborative community feedback.
3. The extent of revisions between the DEIR and the FEIR have become an unwieldy laundry list and subsequently harder to digest both from the community and the probably the state consultants. What is being revised? to what level? and what is merely being continued forward? The latter will require a lot of decision making relative to scope even before the work is executed.

PROPOSALS

The following three proposals can provide a clear and persuasive strategy to address the above issues that can be more productive and eventually more efficient.

1. Initiate an Advisory group as per MEPA guidelines for Green Line Extension Project comprised of the obvious representative groups. such as advocacy groups, community groups, city representatives, and private abutters. etc, as well as being open to the general community.

I-248-002

2. Initiate a Supplemental Environment Impact Report (SEIR) for the maintenance/storage facility.

I-248-003

3. The existing "Environmental Impact Report" (EIR) can become the Final Environmental Impact Report" (FEIR) with "supplementals". This would allow certain portions of EIR such as the transportation volume counts to be carried through without revisions as well provide other immediate cost and time savings. Some obvious supplementals would include economic and land use planning, public/private coordination with existing permitted projects as, coordination with the reconstruction of Route 28, etc. The above noted MEPA advisory committee could evolve this list of supplementals for presentation at the larger public meetings.

Please consider this letter, a coalition letter "exclusive" of the individual letters by the noted endorsers/ advocacy groups, noted below. I appreciate the opportunity to comment on this regional project.

Sincerely,
Bhupesh Patel
3 Bowdoin Street
Cambridge, Ma 01238
(Author of Somerville sponsored "Somerville TOD Study", original founding member of Somerville Bike committee, and original member of mayor appointed Assembly Square Design Review Committee)

Page 1 of 2 prepared by Bhupesh Patel

I-248-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-248-002

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

I-248-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Group members who have discussed the above issues concur with the proposals:

Livable Streets Alliance, Charlie Denison

Somerville Community Corporation, Danny LeBlanc

Johnson, Holly (EEA)

From: john paul [jpx_bus@yahoo.com]
Sent: Monday, November 16, 2009 6:08 PM
To: Johnson, Holly S (ENV)
Cc: Barbara Broussard
Attachments: Greenline extension_Lechmere Station.doc

Dear Ms Johnson and Secretary Bowles,

Attached for your review is a letter regarding the new Lechmere Station as part of the proposal for the Green Line extension. Residents, businesses, shoppers and tourists will all be highly impacted by the new project. East Cambridge residents like myself are very concerned. We will insist on a proposal which will enhance the quality, needs and safety of the community and look forward to working together with you to ensure that result.

Thank you for your consideration,

John Paul

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I am writing to you with respect to the proposed Green Line station at Lechmere. I am a resident of East Cambridge, and an architect who uses the existing station for daily commutes to work and elsewhere in the Boston area. As such I've had a pretty good chance to review the patterns of use at the current station, as well as to anticipate the qualities of proposals for the new station. Additionally, I am an East Cambridge Planning Team participant, and have also attended the meetings where the new Lechmere station proposals have been presented.

The importance of the station as a well used gateway to and from the neighborhood cannot be stressed enough. In addition to the many people like me traveling from our homes here to Boston and beyond, there are the great numbers of workers coming in for the tech industries, the service industries in our hotels etc. and the visitors to the Cambridgeside Galleria. The Galleria alone sees upwards of one million visitors in a year. Additionally a great number of foreign and domestic travelers use the current Lechmere station to get to and from the hotels along the river and on the Obrien Hwy. Our primary concerns are for the safety and convenience to the users, the impact of the station design on the neighborhood, and its ability to shape and accommodate anticipated future urban development. The numbers of people using the Lechmere station can be expected to substantially increase with the Green Line extension.

I-249-001

- Safety: The station's location across Monsignor Obrien Hwy presents some obvious challenges to safety, but the location is understood by most residents to be an inevitable part of the greater benefits of the Green Line extension. That said, extraordinary measures must be taken which to address safety with revisions to the design of the highway for traffic calming. Essential elements are a reduction in the number of lanes and overall width of the highway, along with traffic calming, signals and well designed pedestrian crossings. Note that even the current crossing at Cambridge Street is poor, with challenges between car traffic and pedestrians on the way toward the Galleria – the Obrien Hwy. presents much bigger problems.

I-249-002

- Station Design: The proposed station plans presented to the neighborhood were frankly awful. As a response, a group of East Cambridge residents took it upon themselves to make a counter proposal which has been circulated and which I am sure you have seen. I was not a member of the counter proposals design team, but I believe that it includes many qualities which are considered essential for a new station and that it should be considered seriously by your office. The new station must have indoor space for waiting, purchase of Charlie tickets, etc., it's entrance must be oriented toward the East Cambridge neighborhood as well as North Point, and the bus station must be better integrated into the overall plan. There is no need for the sea of parking shown on the 'official' plan, this is an urban location, NOT a suburban end terminal.

I-249-003

- Urban Redevelopment: Additionally, in the citizens 'counter proposal', the notion of redeveloping the existing Lechmere station area was explored. I support the proposal of market area in conjunction with additional new buildings, including the notion of placing a midrise commercial structure such as a hotel on the triangle of land where Cambridge St. meets Obrien Hwy. Urban density is a practical and visual asset in this location, anchoring this start of Cambridge St, while adding to the vitality and commercial potential of this part of the city.

I hope you will consider the concerns expressed here, and I look forward to working toward a new station which can best serve East Cambridge.

Regards,

John E. Paul
90 Spring Street
Cambridge MA 02141

I-249-001

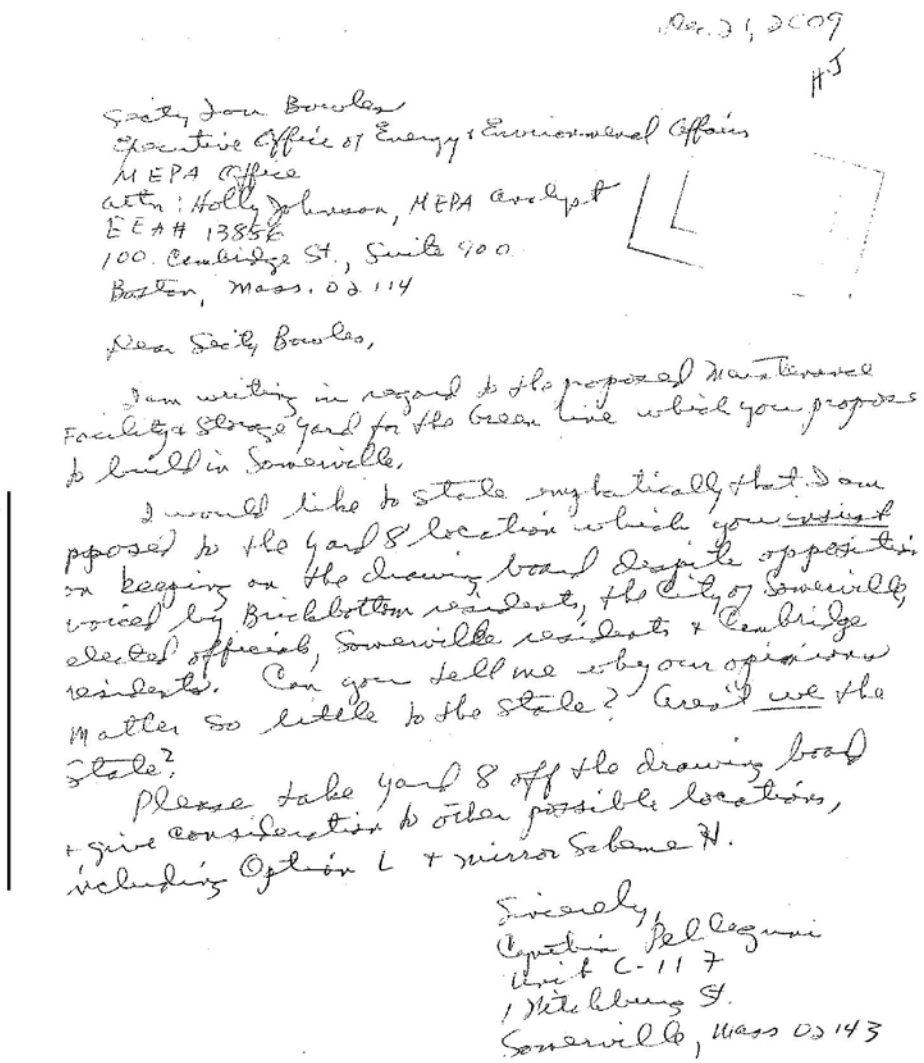
Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-249-002

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-249-003

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.



Dec. 21, 2009

HJ

Secty Ian Bowles
Executive Office of Energy + Environmental Affairs
MEPA Office
attn: Holly Johnson, MEPA Analyst
EEA# 13856
100 Cambridge St., Suite 900
Boston, Mass. 02114

Dear Secty Bowles,

I am writing in regard to the proposed Maintenance Facility + Storage Yard for the Green Line which you propose to build in Somerville.

I-250-001 I would like to state emphatically that I am pposed to the Yard 8 location which you insist on keeping on the drawing board despite opposition voiced by Brickbottom residents, the City of Somerville, elected officials, Somerville residents + Cambridge residents. Can you tell me why our opinions matter so little to the State? Aren't we the State?

Please take Yard 8 off the drawing board + give consideration to other possible locations, including Option L + mirror Scheme H.

Sincerely,
Cynthia Pellegrini
Unit C-117
1 Nitchburg St.
Somerville, Mass 02143

I-250-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Perkins, George [george.perkins@goodyclancy.com]
Sent: Thursday, January 07, 2010 4:09 PM
To: holly.s.johnson@state.ma.us
Subject: Green Line Extension Draft EIR EEA #13886

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson
100 Cambridge Street,
Suite 900 Boston, MA 02114

Re: Green Line Extension Draft EIR (EEA #13886)

The extension of the Somerville Community Path to the Charles River is a critically important milestone in a sustainable future for Massachusetts.

I-251-001

The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the former EOT.

For cost efficiencies and technical necessities, the Green Line and Community Path extensions will be constructed as one project and must clearly be described as such by MassDOT.

MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding that allows bicycle and pedestrian access costs.

Thank you for considering these comments. I support the extension of the Green Line extension to Somerville and Medford and the design of the Somerville Community Path.

Thank you,

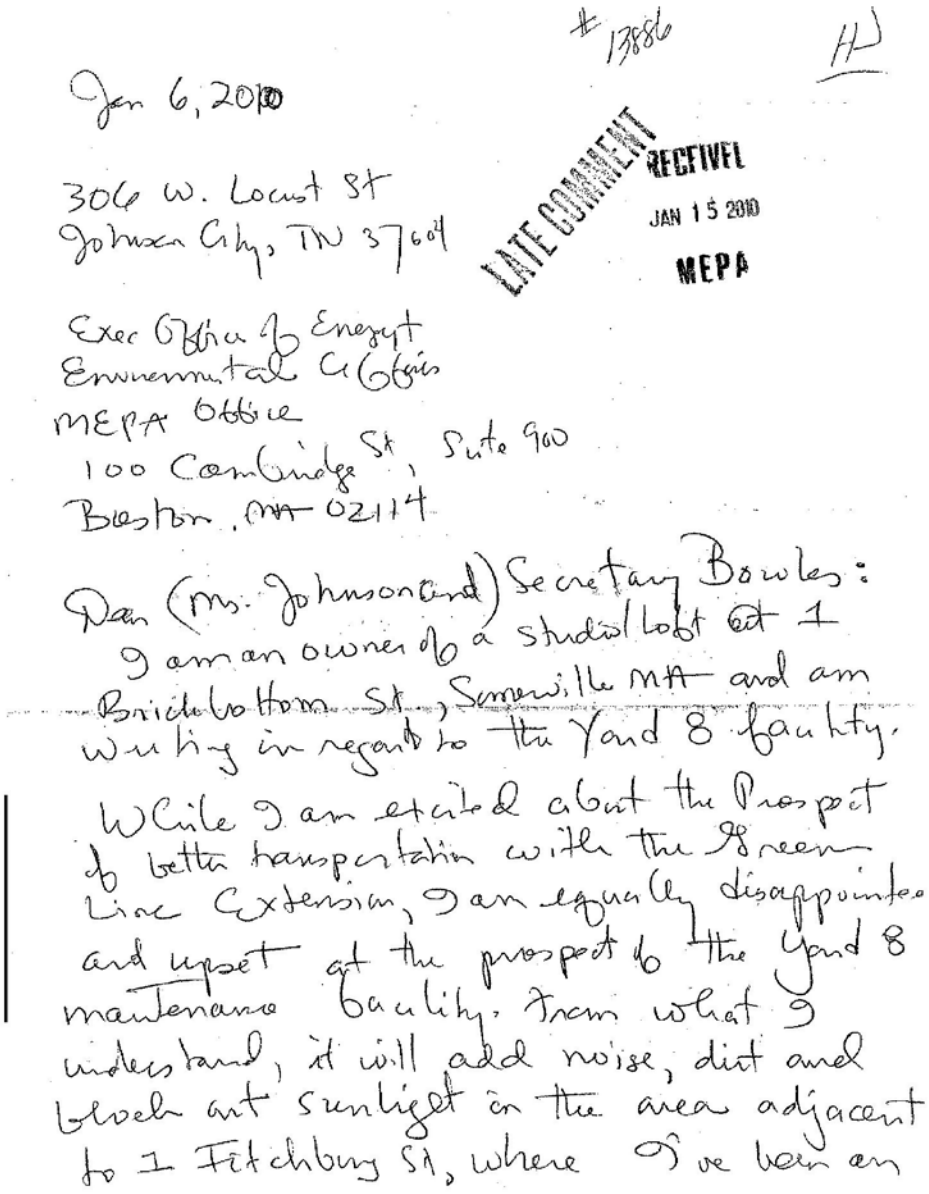
George Perkins AIA
Associate
Goody Clancy
420 Boylston Street
Boston, MA 02116
617.850.6538 (direct)
617.262.2760 (main)
617.262.9512 (fax)
george.perkins@goodyclancy.com

PLEASE DO NOT PRINT....

1

I-251-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.



13886

HJ

Jan 6, 2010

LATE COMMENT RECEIVED
JAN 15 2010
MEPA

306 W. Locust St
Johnson City, TN 37604

Exec Office of Energy
Environmental Affairs
MEPA Office
100 Cambridge St, Suite 900
Boston, MA 02114

Dear (Ms. Johnson and) Secretary Bowles:
I am an owner of a studio/loft at 1
Bridgebottom St., Somerville MA and am
writing in regard to the Yard 8 facility.

I-252-001

While I am excited about the prospect
of better transportation with the Green
Line Extension, I am equally disappointed
and upset at the prospect of the Yard 8
maintenance facility. From what I
understand, it will add noise, dirt and
block out sunlight in the area adjacent
to 1 Fitchburg St, where I've been an

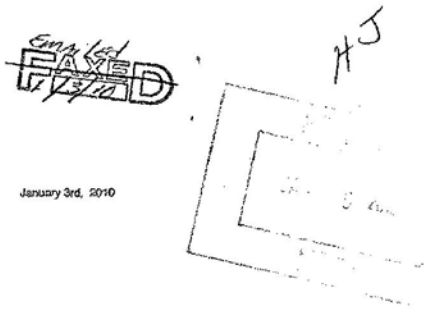
I-252-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

owner since its opening in 1989. Brickbottom is one of the few affordable spaces for artists and it is short-sighted and foolish to damage and degrade a neighborhood whose residents have struggled so hard and so long to improve what had been the grimiest and least attractive area of Somerville and which is now a place that Somerville points to with pride.

Find another place for the facility, please. Know also that its construction will rouse the ire of all 200 plus residents; a compromise will earn you much good will.

Sincerely,
Cynthia Podren
Owner
C117
1 Brickbottom St.



January 3rd, 2010

Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
Project Number EEA #13886
100 Cambridge Street, Suite #900
Boston, MA 02114

Dear Secretary Bowles:

I am writing in regards to Project number EEA #13886, pertaining of the placement of the MBTA Maintenance and Storage facility as part of the MBTA Green Line Extension Plan. As a supporter of the Green Line Extension plan and a 22-year resident of the Brickbottom Artists Building, which is a vibrant artists/craftspersons' community located in Somerville, I firmly believe that the Yard 8 plan for the MBTA storage and maintenance facility is totally unacceptable for the following reasons:

I-253-001 A) The Brickbottom Artists Building, which was originally a warehouse for the now-defunct A & P Market, was founded by a bunch of artists, who, priced out of, or kicked out of Fort Point, had looked for two years for a warehouse, finding a warehouse down in South Boston that was condemned as unsound, and were forced to look further. The founders of Brickbottom Artists Building finally found the place that we're presently in. We are artists, craftspeople, writers, and other people. We work, write, play music, etc., and we happily live here. We are completely and totally opposed to having a maintenance and storage facility for the MBTA trains that would be a mere 50 feet away from the storage and maintenance facility, and the high amount of noise from the trains, etc. for most of the day, particularly at peak hours, would become unbearable. It would also result in excessive pollution at night, and there'd be loss of natural light and view for many, if not most people residing in the Brickbottom Artists' community.

I-253-002 B) Environmental affects of the Yard 8 Plan, too, would be devastating, as there'd be toxic run-off from the contaminated soil in the area.

I-253-003 C) The Yard 8 plan would not only result in expensive mitigation, such as noise barriers which would completely isolate the Brickbottom community from the Inner Belt area and other places, but even the most expensive mitigation procedures, such as noise and light barriers around the Brickbottom Building and special windows put in would not provide even the slightest bit of relief from the devastating effects on the quality of life for Brickbottom residents, including myself, who are committed to continuing to live and work here. The Yard 8 plan would also cost the proponents of this particular plan much more money as well, as a consequence of these costly mitigation procedures, which, as I pointed out, would not work at all, anyway.

I-253-004 D) It's also clear that the vast majority of people who reside in the City of Somerville and the City of Cambridge alike, including leaders/representatives/congresspeople of the area(s) are also opposed to the Yard 8 plan for the above-mentioned reasons. The Yard 8 plan would also have devastating economic effects on the area. The City of Somerville would lose valuable taxable revenue in the form of land that could/would be used for a certain amount of redevelopment.

I-253-005 E) All of the above having been said, this raises yet another question: If the maintenance facility goes into Yard 8 as you've been proposing, who would want to come to the area? What good would the Green Line Extension be if residents of Brickbottom weren't able to enjoy the fruits of it? These two questions are questions that you must ask yourselves....very seriously, in addition to considering the deleterious environmental and economic affects on the general area, and the deleterious affects on the quality of life for the residents of the Brickbottom Artists Building.

Having said all of the above, Yard 8 MUST be taken off the table entirely and alternatives such as Mirror H and Option L, which is the most acceptable of the alternate solutions, must be considered. Land that's already right near the Boston Engine Terminal must also be looked at. Yard 8 is unacceptable, inappropriate, and unfair to everybody involved, and it must be scrapped.

Thanks very much for your time and attention on this matter.

Sincerely,

Mimi Ann Polumbaum
Brickbottom Artists Building #C406
1 Fitchburg Street
Somerville, MA 02143

I-253-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-253-002

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

I-253-003

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

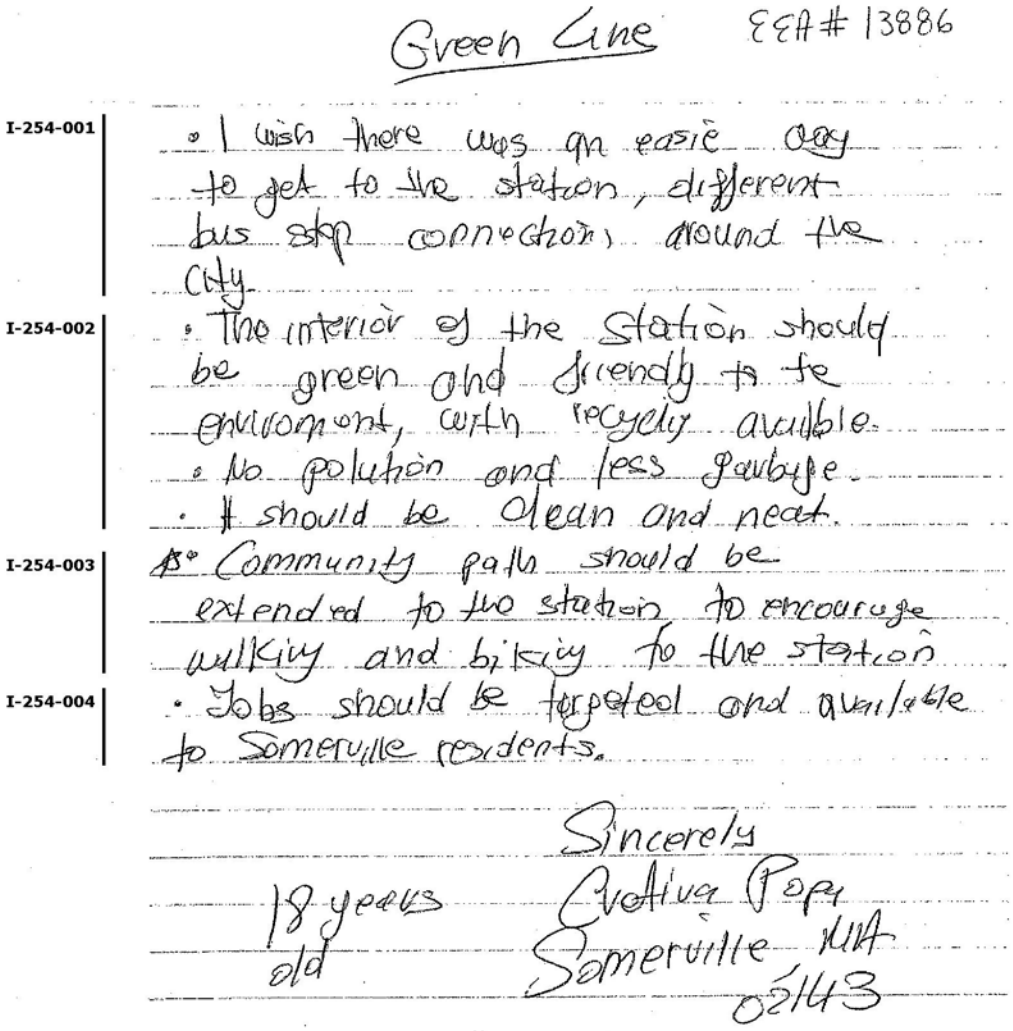
I-253-004

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section

5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-253-005

Please see response to Comment I-253-004.


Green Line EEA# 13886

I-254-001 • I wish there was an easie way to get to the station, different bus stop connection around the city.

I-254-002 • The interior of the station should be green and friendly to the environment, with recycly availble.
• No polution and less garbage.
• It should be clean and neat.

I-254-003 • Community paths should be extended to the station to encourage walking and biking to the station

I-254-004 • Jobs should be targeted and available to Somerville residents.

Sincerely
Cristina Popa
18 years old
Somerville MA
02143

I-254-001

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-254-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-254-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-254-004

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA

Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

Johnson, Holly (EEA)

From: Jordana Psiloyenis [jpsiloyenis@cube3studio.com]
Sent: Thursday, January 07, 2010 2:25 PM
To: Johnson, Holly S (ENV)
Subject: For Secretary Bowles - DEIR for the Green Line Extension Project
Attachments: DEIR Comment Letter_010710_Psiloyenis.pdf

Ms. Johnson,

Please find attached a letter to Secretary Bowles.

Thank you!

Jordana.

Jordana Psiloyenis
Project Coordinator

CUBE 3 Studio LLC
architecture • interiors • planning

360 Merrimack Street
Building 5, Floor 3
Lawrence, MA 01843

Main: 978.989.9900
Fax: 978-379-8751
Cell: 305.491.3423
Web: www.cube3studio.com

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Please consider the environment before printing this email.

January 07, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Via email: Holly.S.Johnson@state.ma.us

Dear Secretary Bowles:

I am a Medford resident writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Cambridge, Somerville and Medford, EEA #13886.

I-255-001 | I strongly support the Green Line extension, and urge that it be built in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. I ask that you reject the DEIR as written because it does not comply with the December 1, 2006 MEPA certificate and does not satisfy the legal mandate to serve the Medford Hillside neighborhood.

The DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014. For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

I-255-002 | • **A two-phased approach is unacceptable.** The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified is a bad idea.

I-255-003 | • **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. There are five separate Environmental Justice sites within walking distance of the Route 16 terminus that will simply not be served by a College Ave terminus.

I-255-004 | • **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. The vast majority of the Medford Hillside neighborhood will not be served by a College Ave terminus.

I-255-005 | • **The Route 16 station design in the DEIR is inadequate.** The DEIR design for the Route 16 station is deficient and unworkable. It unnecessarily calls for the taking of two existing buildings that should remain intact with a proper design. The Final EIR should show a realistic and workable design for the Route 16 site, which is by far the best location for a terminus for the Green Line Extension.

In conclusion, I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis to go to Route 16 to serve the largest possible population, achieve the maximum ridership, and provide the maximum air quality and environmental benefits to the residents of Cambridge, Somerville, and Medford.

Thank you.

Jordana Psiloyenis
42 Dudley Street Third Floor
Medford, MA 02155

I-255-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-255-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-255-003

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-255-004

Please see response to Comment I-255-001.

I-255-005

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Michael Quinn [quinn_dc@yahoo.com]
Sent: Friday, January 08, 2010 10:00 AM
To: Fichter, Katherine (DOT); Johnson, Holly S (ENV)
Subject: Green Line Extension

Good Morning,

I understand that today is the last day for comments regarding the Green Line Extension into Medford. I currently live in South Medford and would be a potential user of the proposed College Avenue stop. Even though I would have little use personally for the Route 16 station, I believe that the city needs this stop. Terminating at College Avenue, even for just 2 years, would rob many residents of the opportunity to make use of the line and would do little to improve air quality in the city of Medford. I urge you to take another look at the situation and make every attempt to get the Route 16 stop up and running by 2014.

I-256-001

Thank you for your time.

Michael Quinn

1

I-256-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Barry Rafkind [barry.rafkind@gmail.com]
Sent: Thursday, January 07, 2010 10:55 PM
To: Johnson, Holly S (ENV)
Subject: Comments Re: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Ian Bowles,

[Executive Office of Energy and Environmental Affairs, MEPA Office]

I-257-001 I support the extension of the Green Line extension to Somerville and Medford and the design of the Somerville Community Path.

I-257-002 This DEIR includes the design of the Community Path but it doesn't commit to design it, pay for it or construct it along with the Green Line extension.

The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractors as agreed to in a February 24, 2009 letter from the former EOT.

For cost efficiencies and technical necessities, the Green Line and Community Path extensions should be constructed as one project and this must clearly be described as such by MassDOT.

I-257-003 MassDOT should commit to work with the City and other State and Federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions (as was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line), including applying for Federal New Starts funding that allows bicycle and pedestrian access costs.

Thank you for considering my comments.

Sincerely,

Barry Rafkind
4 Ossipee Road, Apt 1
Somerville, MA 02144
347-525-5635

1

I-257-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-257-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-257-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: John Read [john.read1018@gmail.com]
Sent: Tuesday, November 24, 2009 9:48 AM
To: Johnson, Holly S (ENV)
Subject: Green Line extension

Dear Ms. Johnson,

I attended the forum on the Green Line extension at Somerville High School last week, and it was quite informative. Although I live in Brockton I am considering a move to the Somerville-Medford area, and am very much in favor of this project.

After listening to many impassioned and well constructed arguments, these are the points I came away with.

I-258-001 1. I would not place that maintenance facility near Brickbottom, unless you don't mind paying lawyers for the next several years. It would be a waste of a potentially vibrant, pedestrian-friendly neighborhood that would do better with restaurants and fairly affordable residences. That sounds like a great little artists' colony, and the maintenance garage would be a slap in the face to those people. I think the man who suggested that the garage be placed near the 93 overpass made the most sense.

I-258-002 2. I believe that each of the new stations needs a safe pull-over lane for pick-ups and drop-offs -- especially for babies, senior citizens and people with disabilities.

I-258-003 3. No more parking garages. The traffic pouring in and out of such facilities would defeat the entire purpose of this project -- namely, getting people out of their cars. A garage at Route 16 would draw an influx from Arlington, where upscale commuters are already salivating at this prospect, but would negatively impact traffic in Somerville and Medford along that route. This additional stop was proposed to EASE the stop-and-go traffic along Mystic Valley Parkway -- which is already horrific during the week -- not to add to it. Without a garage, a safer pedestrian environment for Tufts students and other area residents would be assured.

I-258-004 4. Finally, the bike/pedestrian path is a wonderful idea, but some re-routing of bus lines is also essential to ensure frequent connections to all of these stops. Again, the object is fewer cars on the road.

I wish you all the best in implementing this project. Thank you very much.

John Read

1

I-258-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-258-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-258-003

The preferred alternative does not include construction of a parking garage.

I-258-004

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

Johnson, Holly (EEA)

From: Vaughan Rees [vaughanrees@fastmail.fm]
Sent: Wednesday, January 06, 2010 10:17 PM
To: Johnson, Holly S (ENV)
Subject: Comment on DEIR Green Line Extension
Attachments: DEIR Letter from VW Rees.pdf

Dear Ms Johnson,
Please find attached a letter to Secretary Bowles which contains my comments on the Draft Environmental Impact Report on the Green Line Extension to Medford.

Thank you for passing this letter on to the Secretary.

Sincerely,

Vaughan Rees

46 Rock Hill St
Medford, MA 02155

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

Re: Draft Environmental Impact Report (DEIR): Green Line Extension project to Medford, EEA #13886

I-259-001 I support the extension of the MBTA Green Line to the proposed terminus at Mystic Valley Parkway/Route 16. As a local resident, I believe that the proposed Route 16 Station is in the best interests of my family and my community.

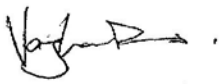
However, I have read the Draft Environmental Impact Report and wish to voice my concerns with its conclusions.

I-259-002 The proposed two-stage approach is a poor solution which will cause delays in implementation and increased costs and disruption to local residents. It is clear that The Route 16 site offers a more suitable option as a terminus and is greatly preferable to the College Avenue site proposed by the DEIR. This solution is not in the interests of the local community.

I-259-003 I am concerned that the DEIR has not fully considered optimal station designs for a Route 16 station. The proposed "worst case scenario" design is inadequate and fails to serve the general public or the needs of the local community.

I strongly urge you to not accept the DEIR as the final EIR. I want you to request a further environmental analysis of the project by MassDOT.

With thanks,
Yours sincerely,



Vaughan W. Rees, PhD

I-259-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-259-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-259-003

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and

layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: jj_boston75@netzero.net
Sent: Monday, January 04, 2010 1:52 PM
To: Johnson, Holly S (ENV)
Subject: comments regarding draft environmental report for the Green Line Extension into Medford

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us

I am writing today to submit my comments regarding the draft environmental report for the Green Line Extension into Somerville and Medford.

The most important thing to me is that the project stay on schedule. There are so many times in the past months and years when I have wished I could walk to the green line and go where I needed to go without driving. I want the green line extended ASAP.

I understand that the Somerville Transportation Equity Partnership (STEP) and Medford Green Line Neighborhood Alliance (MGNA) have some criticisms of the report. I find these two organizations very trustworthy, and suspect their criticisms are all valid and need further review, however, my understanding is that this report is not meant to have fully designed concepts, and that it is meant as an early-in-the-design-process evaluation of environmental impacts only. I suspect that some of STEP's and MGNA's criticisms are things that would be addressed in future design development regardless of whether STEP and MGNA mentioned them at this stage of design. I request that you keep their criticisms in mind during design development though.

I-260-001

Most of the concerns I have right now are about my city's government (Medford), and their lack of involvement and enthusiasm for this project. I want you to be aware that there are Medford residents who fully support this project and are eager to see it completed. I have prepared a draft letter to the City of Medford City Council and Mayor that I have not yet sent to them, but which I have pasted below to let you know my opinion regarding anti-green line comments I've heard at meetings, and my responses including where I think the CITY OF MEDFORD needs to take action:

- Land takings: First, the residential property that might be taken are, as I understand it, tiny slivers, likely 6 inches trimmed off the edge of a property. Second, while I do feel compassion for those who might be affected by land takings, this project is the exactly the type of project that eminent domain is appropriate for. It brings tremendous benefit (transportation related, environmental, financial, etc.) to thousands of Medford residents, while having a negative impact on very few (who already previously chose to live or work along existing railroad tracks). I would like to see the project designed to minimize land takings as much as possible, especially for residential properties, but there might be a limit to what the project designers can do to get rid of property takings. I strongly disagree with the councilors who have been suggesting that the project "should not take ANY property in Medford". If land needs to be taken, then as long as the property owners get fair

I-260-002

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I-260-001

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-260-002

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-260-002

market value for the land taken, I think it is appropriate to take land to make this particular project a reality. For businesses I feel somewhat less compassion… I've worked for companies that have relocated. I can say from experience that the "pain" of relocating a business is very temporary and short duration. I would, however, like to see the CITY OF MEDFORD make proactive advances toward these businesses to try to find places for them to relocate within Medford, and to assist in making sure any property owners with land taken get fair market value.

I-260-003

- Increased traffic and parking: The CITY OF MEDFORD desperately needs to establish a parking department similar to Somerville's and make strictly enforced resident only parking zones throughout the city, especially near proposed green line stations, to prevent the green line project from increasing parking problems. So long as permit parking is addressed and enforced, and the project's designers don't include parking lots at stations, I can't see how the project will increase traffic and parking. I would expect it to DECREASE traffic as locals choose the green line over driving.

I-260-004

- Noise: I would like to see the CITY OF MEDFORD actively seek noise barriers wherever needed, but I do not think this issue should impact the progress of the extension. Abutters already chose to live next to an active commuter rail line… you can't move in next to noisy train tracks and then complain too much about noise. With noise barriers, there is a potential to reduce noise levels from present levels even with the addition of the green line trolleys.

I-260-005

- Increased pollution: I think this is a completely bogus argument. Any property along the commuter rail is undoubtedly ALREADY experiencing the maximum pollution they could. The green line is electric and will not produce any additional pollution. Moving the commuter rail a few feet will not affect their already maximized level of pollution. The only thing that could change their level of pollution is if the commuter rail were changed to a clean fuel, such as by electrification. The anticipated reduction in local street traffic should improve local air quality. I do not think the City of Medford needs to take any action on this issue.

I-260-006

- Decreased property values: I cannot imagine how this project would decrease property values… living near a subway stop is extremely desirable. I believe property values will increase, not decrease.

- (increased property values leading to) gentrification: For those who own their property, they don't have to sell. For those who do sell their property to cash in on increased home value due to proximity to subway, that is their choice, and there may be some gentrification caused by their own desires for profit. That is not something the City of Medford needs to be terribly concerned about. Renters, on the other hand, could see big problems with increased rents. It will be up to the CITY OF MEDFORD to decide whether some sort of low income housing laws are enacted. The CITY OF MEDFORD needs to proactively investigate likely future scenarios, and how we want to address them through legislation. I have no opinion on how to proceed, I just want to know that my government officials are thinking seriously about this issue.

I-260-007

- The MBTA is too cash strapped to do this project: First of all, the MBTA's finances don't directly affect Medford residents as far as I can tell. Second, this project is a legal commitment for the state, and will provide an opportunity to greatly improve the lives and livelihoods of Medford residents, so it is worth the investment to Medford. Third, adding riders they didn't have before is an opportunity to add income for the MBTA in the future and improve their financial state. Fourth, my understanding is that a big part of the reason why the MBTA has a deficit is a two-fold funding problem in that they forward funded without realistically estimating future expenses, and that they are trying to make the MBTA self-sustaining. Given that, other than MAYBE toll roads, the highways and roads throughout the state do not make any money despite gas taxes, but rather are a financial burden to

2

I-260-003

DEIR Table 6-1, Project Mitigation Commitments, lists the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address (among other things) parking enforcement coordination. The project is expected to reduce overall regional traffic levels.

I-260-004

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-260-005

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

I-260-006

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit

I-260-007

cities and the state, I have no problem with the MBTA not being profitable either. Highways and roads increases pollution, clean energy public transportation does not… I'm happy to throw state money at the clean projects rather than the polluters.

Thank you for your time and consideration,

Jeff Reese
21 Dexter St.
Medford, MA

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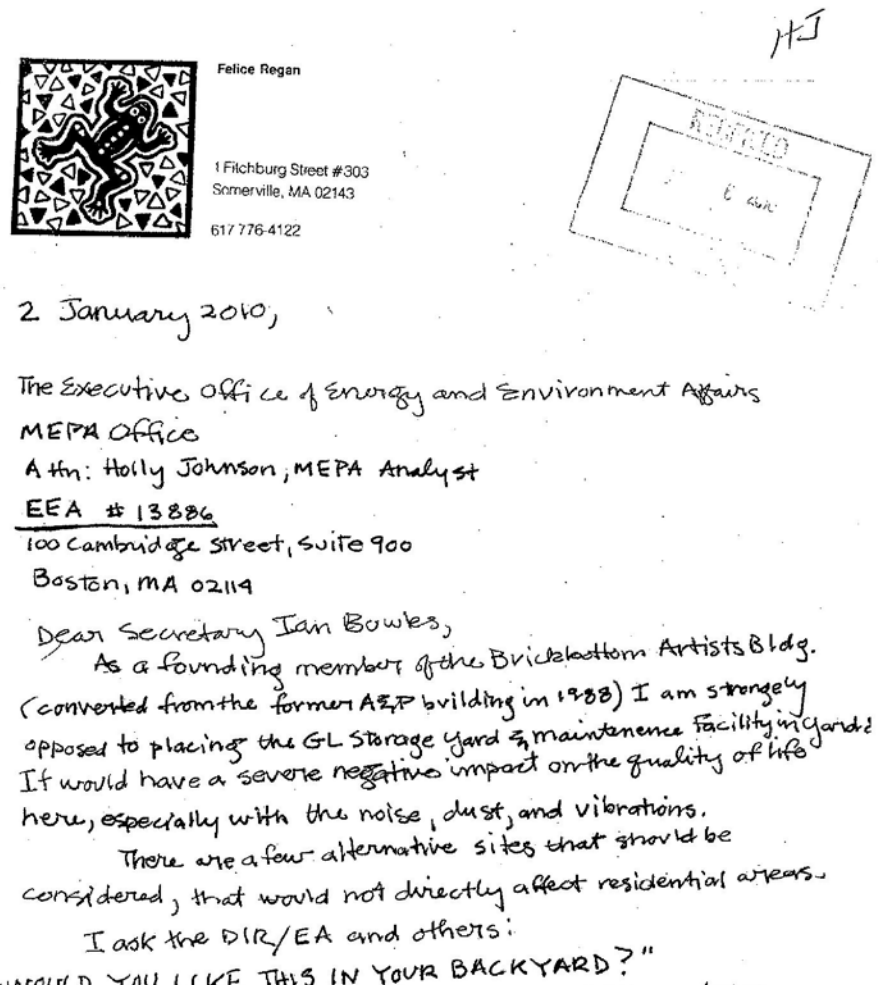
access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-260-007

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.



Felice Regan

1 Fitchburg Street #303
Somerville, MA 02143

617 776-4122

2 January 2010,

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA # 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

As a founding member of the Brickbottom Artists Bldg. (converted from the former A&P building in 1988) I am strongly opposed to placing the GL Storage Yard & Maintenance Facility in Yard 8. It would have a severe negative impact on the quality of life here, especially with the noise, dust, and vibrations.

I-261-001

There are a few alternative sites that should be considered, that would not directly affect residential areas.

I ask the DIR/EA and others:

"WOULD YOU LIKE THIS IN YOUR BACKYARD?"

Thank you for your consideration of Alternatives to Yard 8.

Sincerely,

Felice Regan

I-261-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Mary Regan
102 Morrison Ave., #3
Somerville, MA 02144

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

RE: EEA #13886

Dear Secretary Bowles:

I am very excited about the coming of the green Line to Somerville! I also want it to be done right – equitably, sustainably and with full appreciation of the impact on this and future generations of residents of Somerville, Cambridge and Medford.

I-262-001 To meet the SIP commitment of completing the project by December 31, 2014 design and construction must proceed expeditiously, but thoughtfully so that the extensions are done well. This can be accomplished by ensuring that critical factors discussed below are addressed through either requiring a supplemental EIR or addressing these issues through addendums to the FEIR. This must be done efficiently with the collaboration of the communities and citizens.

I-262-002 First, I strongly urge you to **eliminate the Yard 8 Option for the Maintenance Facility** and to require Mass DOT to carry out a full analysis of the Option L alternatives and Option H for siting the Maintenance Facility.

Yard 8 is opposed by the cities of Somerville and Cambridge and community residents. It would impose an onerous transportation infrastructure burden on the city that would negatively impact quality of life and preclude economic development of Brick Bottom/Inner Belt. The Secretary's Certificate to conduct the DEIR specifically warned against increasing such burdens on Somerville and its residents.

I-262-003 Second, it is critically important that in approving the FEIR there is a requirement to **establish a REALLY collaborative public participation process** with the cities of Somerville, Cambridge and Medford and community representatives for the next phases of the Green Line extensions to ensure that design and construction decisions maximize current and future use. To make this collaboration most effective we strongly urge the **establishment of a staffed field office in Somerville.**

I-262-004 Third, the **Community Path must be fully integrated into the design, planning, and construction of the Green Line extension.** The Path exemplifies the Federal Transit Administration's new policy on bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The proposed policy states:

I-262-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-262-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-262-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-262-004

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

For purposes of determining whether a pedestrian or bicycle improvement has a physical or functional relationship to public transportation, regardless of whether it is funded as a capital project or public transportation enhancement, all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation. According to a test of activity and use, pedestrian and bicycle improvements beyond these threshold distances may be eligible for FTA funding if the improvement is within the distance most people can be expected to safely and conveniently walk or bicycle to use that particular transit service. Federal Register: November 13, 2009 (Volume 74, Number 218), http://edocket.access.gpo.gov/2009/E9-27240.htm.

I-262-005 Fourth, the **Mystic Valley Parkway / Route 16 terminus should be designed and constructed at the same time as the rest of the project.**

I-262-006 Lastly, **construction of the Green Line extension should be coordinated with traffic calming of McGrath/O'Brien Highway.** In Somerville this would involve eliminating the Washington St. overpass to make the roadway a boulevard that would open up Union Square to East Somerville and facilitate economic development for the area. The overpass has been identified as needing reconstruction and funding has been identified in the Boston MPO RTP. The community does not want this burdensome transportation infrastructure monstrosity rebuilt and the time to address this is when the Green Line is being designed. In Cambridge traffic calming will be required along McGrath-O'Brien Highway to accommodate pedestrians going to the relocated Lechmere Station.

Specific concerns in the DEIR that should be addressed in addenda to the FEIR that are not discussed above include:

Station Design & Siting

I-262-007 • Green Line station designs should accommodate bus drop off and pick-up with **maximum integration of transit modes and minimal street disruption.** Bus routes in Somerville must be aligned to optimize connections to Green Line stations simultaneous to the start of Green Line service, as was done for the Red Line northwest extension.

I-262-008 • Station designs should locate **headhouses on major streets** whenever possible, with station access from both sides of the street and in all directions of travel. Design should allocate space for bus transfers and allow car drop off, but not parking

I-262-009 • Stations should provide **adequate bicycle storage** calculated on 3 to 5% of boardings at the stations. Bicycle storage should be sheltered from the elements.

I-262-010 • New station platforms should be constructed for ADA-compliant level boarding for new low-floor Green Line cars that have sliding rather than accordion doors currently used on Green Line cars.

I-262-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-262-006

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-262-007

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-262-011 • **Station and station area designs must be developed through a formal and interactive community participation process** to ensure that they fit into existing neighborhoods and support appropriate future mixed use development. Takings should be minimized to save the state money and to preserve land uses.

I-262-012 • Design for the relocated Lechmere Station should pay particular attention to the East Cambridge Planning Team's pedestrian-friendly area design ideas and old Lechmere Station re-use suggestions. The terminus at Route 16 should incorporate the Medford Green Line Neighborhood Alliance's design ideas that minimizing takings.

I-262-013 • Station design and siting should involve active participation of knowledgeable transportation accessibility advocates to **ensure accessibility requirements are adequately addressed.**

Community Path Integration & Preservation of Corridor Transit Potential

I-262-014 • **Track design and construction should enable adding future stations** – between Lechmere and Washington Street/Union Square, between College Avenue and Route 16, and along a future Green Line extension from Union Square to Porter Square that could serve both Cambridge and Somerville neighborhoods.

I-262-015 • **The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension** in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

Economic Development & Regional Corridor Planning

I-262-016 • Making the project succeed regionally requires collaboration of Mass DOT and the MBTA, the Executive Office of Community and Economic Development and the Executive Office of Energy and Environmental Affairs with the cities of Somerville, Cambridge and Medford and its community representatives.

I-262-017 • Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a neighborhood and local business friendly surface boulevard that serves pedestrians and bicyclists as well as cars. Improved connectivity between both sides of Route 28 is crucial for economic development, pedestrian station access, and improved quality of life.

I-262-018 • The design and siting of the maintenance facility should not prevent development of a street grid in Inner Belt/Brick Bottom that enables access from North Point, McGrath-O'Brian Highway and Washington St.

I-262-019 • State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts.

I-262-008

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-262-009

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-262-010

The Green Line Extension Project is being designed for fully accessible stations in compliance with ADA requirements. However, the issue of systemwide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this Project.

I-262-011

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-262-012

MassDOT has reviewed the suggestions submitted by the East

I-262-020 Maintaining diversity in people and businesses while improving the natural environment is critical. Access to open space and greenery promotes health.

Maintenance Facility & Regional Environmental Justice

I-262-021 • As noted above, more detailed analysis of Mirror H, Option L and the Option L alternative is necessary. The siting of the maintenance facility and storage yards should not increase the transportation infrastructure and environmental burdens in Somerville or interfere with proposed economic development in the Brickbottom Inner Belt area.

I-262-022 • Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston needs to be phased out and a new facility built south of Boston to eliminate the unsustainable and unjustifiable shuttling of trains through Cambridge.

Public Participation

I-262-023 • A project-wide Citizens Advisory Group should be maintained throughout detailed design, engineering, construction and start-up phases with smaller local advisory groups established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues.

I-262-024 • A procedure for determining remedies and/or compensation, incorporating community representation, should be required to handle instances when project mitigation proves insufficient to meet pre-agreed impact standards for noise, vibration, pollution and other environmental burdens.

• MEPA should require collaborative planning, with community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work out of a centrally located field office to maximize access.

I appreciate the opportunity to make these comments on this critically important project.

Sincerely,

Mary Regan

Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. MassDOT intends to demolish the existing station and prepare the site for future reuse. The Public Involvement Plan, Chapter 6 of the FEIR, proposes a structure for community involvement throughout the Project design process.

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. In the interim, MassDOT proposes a community planning process for the area of a future Mystic Valley Parkway/Route 16 station to cover issues relating to station design and layout, neighborhood impacts, attendant economic development, and other area planning issues.

I-262-013

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-262-014
As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-262-015
MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-262-016
MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

I-262-017
DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-262-018
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter

2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-262-019

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-262-020

Anticipated indirect and cumulative effects the Project, including economic development, natural systems, and open space impacts, are described in DEIR/EA Section 5.15, Indirect and Cumulative Effects. As stated in FEIR Section 6.4.4, MassDOT and the MBTA will conduct a series of public workshops to gather input on land use and facility design issues from the communities. These workshop offer an opportunity to discuss how facility design can influence indirect and cumulative effects. The Project broadens access to open spaces in the corridor.

I-262-021

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility

alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-262-022
The Boston Engine Terminal (BET) and its operations are beyond the scope of the Green Line Extension Project.

I-262-023
In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-262-024
MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

Johnson, Holly (EEA)

From: Arnold G. Reinhold [reinhold@world.std.com]
Sent: Wednesday, December 09, 2009 11:17 PM
To: Holly.S.; Johnson@state.ma.us
Subject: Comments on the Green Line extension DEIR/EA

I would like to comment on the Draft Environmental Impact Report/Environmental Assessment for the Green Line extension to Somerville. I believe this is an important project that should go forward. However I have some areas of concern.

I-263-001

1. Lack of automobile parking.
One lesson of the MBTA's expansion since the 1980s has been the value of anchoring new lines with parking facilities. I realize that the Route 16 station is being deferred until phase II, but I deplore the elimination of parking from the plans for this station. Without some parking, the line mainly benefits people in walking distance of the stations. Parking at Route 16 would draw more riders from Medford and relieve overflow demand at the nearby Alewife Garage. While Route
16 is crowded at rush hour, drivers who would travel on it to park at the Route 16 T station would not add to the traffic burden on roads closer to Boston. Thus the limited capacity of Route 16 is better employed moving cars to a Green Line terminus parking facility. Also note that having a family member drop a passenger off at the station requires twice as much car travel as if the passenger parks at the station. Commercial parking facilities near some of the stations located in industrial areas should also be encouraged.

I-263-002

2. Lack of assured funding for the Somerville Community Path.
I believe the Somerville Community Path should be built in parallel with the Green Line extension. By facilitating bike commuters, the path would substantially increase the area that the new Green Line serves and redress some of the concerns I expressed above about the lack of parking along the line. The Community Path is relatively inexpensive compared to the overall project and would significantly improve its use.

I-263-003

3. Bus connections.
At some proposed stations, local bus stops are located several hundred feet from the station. I think every station that has local bus service should be provided a stop as close as possible to the station. Local bus connections extend the area served by the new Green Line and they should be facilitated. Bus shelters should also be provided for Green Line passengers who are transferring to a bus.
A few exposed waits for a bus home on a cold, dark and wet winter day will send many passengers back to their cars.

I-263-004

4. Poor pedestrian connections at Route 16.
The natural location of the Route 16 station requires circuitous pedestrian routes into Medford, either via Boston Ave or Auburn St.
People who live quite close to the station will have to walk 5-8 blocks to get there. Consideration should be given in Phase II to a pedestrian bridge over Alewife Brook and short pedestrian/bike path along the MBTA right of way to Canal Street or even to Route 60. Pedestrian access should also facilitated for the VNA Senior Housing complex at Capen Ct, preferably not along Alewife Brook Parkway, but using a more senior-friendly "inland" route via Capen and Stoughton Streets.

I-263-005

5. Lack of bike parking quantification.
The DEIR/EA description for each station says bicycle parking will be provided. But I did not find any statement about how many bike parking spots will be provided. Such numbers are essential for the public to determine whether sufficient bike parking will be available. I

I-263-001

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-263-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-263-003

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-263-005

would also like to see provision for expansion of bike parking at each station if demand justifies it.

Again I do support this project overall.

Respectfully submitted,

Arnold Reinhold
14 Fresh Pond Place
Cambridge, MA 02138
617 491 4937

I-263-004

Please see response to Comment I-263-001.

I-263-005

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

Johnson, Holly (EEA)

From: Ellin Reisner [reisnere51@gmail.com]
Sent: Thursday, January 07, 2010 10:40 PM
To: Johnson, Holly S (ENV)
Cc: Fichter, Katherine (DOT)
Subject: Comments on EEA #13886, Green Line Extension DEIR
Attachments: Reisner-GL-DEIR LTR.pdf

Ellin Reisner
51 Mount Vernon Street
Somerville, MA 02145

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: **EEA #13886**

Dear Secretary Bowles:

I-264-001 I am very appreciative of the efforts of Mass DOT to move the project forward with the release of the Draft EIR and am writing you to recommend approval of the DEIR as a Final EIR under the condition that a number of critical issues are addressed in the next phase of the project.

To meet the SIP commitment of completing the project by December 31, 2014 design and construction must proceed expeditiously, but thoughtfully so that the extensions are done well. This can be accomplished by ensuring that critical factors discussed below are addressed through either **I-264-002** requiring a supplemental EIR or addressing these issues through addendums to the FEIR. This must be done efficiently with the collaboration of the communities and citizens.

I-264-003 First, I strongly urge you to eliminate the Yard 8 Option for the Maintenance Facility and to require Mass DOT to carry out a full analysis of the Option L alternatives and Option H for siting the Maintenance Facility.

Yard 8 is opposed by the cities of Somerville and Cambridge and community residents. It would impose an onerous transportation infrastructure burden on the city that would negatively impact quality of life and preclude economic development of Brick Bottom/Inner Belt. The Secretary's Certificate to conduct the DEIR specifically warned against increasing such burdens on Somerville and its residents.

I-264-004 Second, it is critically important that in approving the FEIR there is a requirement to establish a REALLY collaborative public participation process with the cities of Somerville, Cambridge and Medford and community representatives for the next phases of the Green Line extensions to ensure that design and construction decisions maximize current and future use. To make this collaboration most effective we strongly urge the establishment of a staffed field office in Somerville.

1

I-264-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-264-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-264-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-264-004

Please see response to Comment I-264-002.

I-264-005

Third, the Community Path must be fully integrated into the design, planning, and construction of the Green Line extension. The Path exemplifies the Federal Transit Administration's new policy on bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The proposed policy states:

> For purposes of determining whether a pedestrian or bicycle improvement has a physical or functional relationship to public transportation, regardless of whether it is funded as a capital project or public transportation enhancement, all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation. According to a test of activity and use, pedestrian and bicycle improvements beyond these threshold distances may be eligible for FTA funding if the improvement is within the distance most people can be expected to safely and conveniently walk or bicycle to use that particular transit service. Federal Register: November 13, 2009 (Volume 74, Number 218), http://edocket.access.gpo.gov/2009/E9-27240.htm.

I-264-006

Fourth, the Mystic Valley Parkway / Route 16 terminus should be designed and constructed at the same time as the rest of the project.

I-264-007

Lastly, construction of the Green Line extension should be coordinated with traffic calming of McGrath/O'Brien Highway. In Somerville this would involve eliminating the Washington St. overpass to make the roadway a boulevard that would open up Union Square to East Somerville and facilitate economic development for the area. The overpass has been identified as needing reconstruction and funding has been identified in the Boston MPO RTP. The community does not want this burdensome transportation infrastructure monstrosity rebuilt and the time to address this is when the Green Line is being designed. In Cambridge traffic calming will be required along McGrath-O'Brien Highway to accommodate pedestrians going to the relocated Lechmere Station.

Specific concerns in the DEIR that should be addressed in addenda to the FEIR that are not discussed above include:

Station Design & Siting

I-264-008

- Green Line station designs should accommodate bus drop off and pick-up with maximum integration of transit modes and minimal street disruption. Bus routes in Somerville must be aligned to optimize connections to Green Line stations simultaneous to the start of Green Line service, as was done for the Red Line northwest extension.

I-264-009

- Station designs should locate headhouses on major streets whenever possible, with station access from both sides of the street and in all directions of travel. Design should allocate space for bus transfers and allow car drop off, but not parking

I-264-010

- Stations should provide adequate bicycle storage calculated on 3 to 5% of boardings at the stations. Bicycle storage should be sheltered from the elements.

I-264-011

- Consideration should be given to design new Green Line stations with elevators but not escalators, which are expensive to install and maintain. Wide staircases and redundant ADA elevator access would more reliably meet accessibility needs.

I-264-012

- New station platforms should be constructed for ADA-compliant level boarding for new low-floor Green Line cars that have sliding rather than accordion doors currently used on Green Line cars.

2

I-264-005

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-264-006

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-264-007

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-264-008

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and

I-264-013 • Station and station area designs must be developed through a formal and interactive community participation process to ensure that they fit into existing neighborhoods and support appropriate future mixed use development. Takings should be minimized to save the state money and to preserve land uses.

I-264-014 • Design for the relocated Lechmere Station should pay particular attention to the East Cambridge Planning Team's pedestrian-friendly area design ideas and old Lechmere Station re-
I-264-015 use suggestions. The terminus at Route 16 should incorporate the Medford Green Line Neighborhood Alliance's design ideas that minimizing takings.

I-264-016 • Station design and siting should involve active participation of knowledgeable transportation accessibility advocates to ensure accessibility requirements are adequately addressed.

Community Path Integration & Preservation of Corridor Transit Potential

I-264-017 • Track design and construction should enable adding future stations – between Lechmere and Washington Street/Union Square, between College Avenue and Route 16, and along a future Green Line extension from Union Square to Porter Square that could serve both Cambridge and Somerville neighborhoods.

I-264-018 • The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly-functional Community Path.

Economic Development & Regional Corridor Planning

I-264-019 • Making the project succeed regionally requires collaboration of Mass DOT and the MBTA, the Executive Office of Community and Economic Development and the Executive Office of Energy and Environmental Affairs with the cities of Somerville, Cambridge and Medford and its community representatives.

I-264-020 • Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a neighborhood and local business friendly surface boulevard that serves pedestrians and bicyclists as well as cars. Improved connectivity between both sides of Route 28 is crucial for economic development, pedestrian station access, and improved quality of life.

I-264-021 • The design and siting of the maintenance facility should not prevent development of a street grid in Inner Belt/Brick Bottom that enables access from North Point, McGrath-O'Brian Highway and Washington St.

I-264-022 • State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts. Maintaining diversity in people and businesses while improving the natural environment is critical. Access to open space and greenery promotes health.

Maintenance Facility & Regional Environmental Justice

I-264-023 • As noted above, more detailed analysis of Mirror H, Option L and the Option L alternative is necessary. The siting of the maintenance facility and storage yards should not increase the

3

Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-264-009

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-264-010

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed

I-264-023

transportation infrastructure and environmental burdens in Somerville or interfere with proposed economic development in the Brickbottom Inner Belt area.

I-264-024

- Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston needs to be phased out and a new facility built south of Boston to eliminate the unsustainable and unjustifiable shuttling of trains through Cambridge.

Public Participation

I-264-025

- A project-wide Citizens Advisory Group should be maintained throughout detailed design, engineering, construction and start-up phases with smaller local advisory groups established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues.

I-264-026

- A procedure for determining remedies and/or compensation, incorporating community representation, should be required to handle instances when project mitigation proves insufficient to meet pre-agreed impact standards for noise, vibration, pollution and other environmental burdens.

I-264-027

- MEPA should require collaborative planning, with community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work out of a centrally located field office to maximize access.

I appreciate the opportunity to make these comments on this critically important project.

Sincerely,

Ellin Reisner

--
Ellin Reisner, Ph.D.
reisnere51@gmail.com

4

bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-264-011

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-264-012

The Green Line Extension Project is being designed for fully accessible stations in compliance with ADA requirements. However, the issue of systemwide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this Project.

I-264-013

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-264-014

MassDOT has reviewed the suggestions submitted by the East

Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-264-015

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-264-016

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project’s preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and

stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-264-017

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-264-018

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-264-019

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

I-264-020

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-264-021

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-264-022

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-264-023

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's

preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-264-024

The Boston Engine Terminal (BET) and its operations are beyond the scope of the Green Line Extension Project.

I-264-025

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-264-026

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-264-027

Please see response to Comment I-264-025.

Johnson, Holly (EEA)

From: Jill [typejill@yahoo.com]
Sent: Saturday, January 02, 2010 9:34 AM
To: Johnson, Holly S (ENV)
Subject: Green Line extension

I-265-001

To Whom It May Concern:
It is essential that the Green Line extension be guaranteed to Route 16 in Medford. This greatly increases those who have access to the line. I could leave my car at home and walk a 1/2 mile to the train. At the moment, there is no reliable, convenient access. Ideally a heated station would transform transportation here. If it made any sense we would hope for a station that connected to the West Medford station, but that intersection is already stressed and dangerous. Short of a solution to that, we require that a Rt. 16 station be guaranteed. Please find a way to do this.

There is a train that rarely runs and is expensive. There is a bus that is unreliable and requires one to wait outside with no shelter for long periods of time. I have lived in Porter Square and by far, of all the methods of transportation there, the T is the most efficient, reliable and constant transportation. Even if it was an outside station, it would be a much shorter wait and the connections are so much easier and underground.

If you want to people to use public transportation and minimize pollution it has to meet some basic needs noted above and be easily accessible.

Jill Richard
291 High Street, Medford, MA 02155

1

I-265-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: rrockenmacher@comcast.net
Sent: Wednesday, January 13, 2010 4:46 PM
To: Johnson, Holly S (ENV)
Subject: MBTA green line extension

Dear Ms. Johnson,

I am writing to offer my qualified support of the proposed green line extension. I think this is a very important project, and an important step toward reducing car use and pollution in these densely populated sections of Somerville and Medford.

But I would like to underline the qualifications. I believe that the plan must:

I-266-001 -extend until route 16. This would permit access from the Medford Hillside neighborhood, as required, and greatly increase access to the residential communities in the area, not just Tufts University (which surrounds most of the area near the College Ave. stop).

I-266-002 -minimize the taking of residential land

I-266-003 In addition, I think that the Ball Street station should have a north side access. South Medford is Medford's most densely populated area. Providing an access on the side across from Boston Ave., on one of the side streets to Winchester Street, would greatly facilitate access to South Medford residents. With access only on the south side (Broadway and Boston Ave.) this is helpful to the many Somerville residents and businesses, but not to the MANY people of South Medford. Even a footbridge across the tracks, or a tunnel like that at Lechmere, would make a big difference by these busy streets.

Thank you,

Dr. Rachel Rockenmacher
41 Marion Street
Medford, MA 02155

1

I-266-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-266-002

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-266-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific

design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Johnson, Holly (EEA)

From: Juliette Rooney-Varga [juliette.rooneyvarga@gmail.com]
Sent: Monday, November 16, 2009 10:47 AM
To: Johnson, Holly S (ENV)
Cc: Fichter, Katherine (DOT)
Subject: Green Line Extension in Somerville

Dear Ms. Johnson,

I-267-001

I am writing to express my strong support for the Green Line extension in Somerville. As a Somerville resident and parent, and as an environmental scientist, I am in support of this project on many levels. As one of the most dense residential areas in New England, Somerville is an ideal location for effective public transportation. Yet, we are currently woefully under-served in this area. As the need to curtail Massachusetts' greenhouse gas emissions becomes more urgent, we need to improve public transit options, especially in places like Somerville where public transit is efficient and in high demand. I would happily support moves to reduce our subsidies of automobile transport, as well as increased gas taxes, in order to move forward with the public transit projects that we need now and that will create a healthier environment for our children.

Sincerely,

Juliette Rooney-Varga
16 Josephine Ave. Apt. 2
Somerville MA

--
Juliette Rooney-Varga, Ph.D.
Associate Professor, Biological Sciences, UMass Lowell

1

I-267-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Johnson, Holly (EEA)

From: Lynn Rosenbaum [lynnarosenbaum@gmail.com]
Sent: Monday, January 04, 2010 2:10 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension

Dear Ms. Johnson,

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-268-001 As a resident of West Medford living within walking or biking distance of Rt. 16 and Boston Ave, I strongly support the Green Line extension going all the way to this juncture. It would allow me to get out of my car and take the T much more often.

I-268-002 In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, not with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT.

Sincerely,

Lynn Rosenbaum
30 Pitcher Ave
Medford, MA 02155

I-268-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-268-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Johnson, Holly (EEA)

From: Sara Rosenfeld [sara.rosenfeld@nemoves.com]
Sent: Thursday, January 07, 2010 6:52 PM
To: Johnson, Holly S (ENV)
Subject: comments about the Greenline extension

I-269-001
I-269-002

Thank you for taking our comments. No program is going to be perfect. We need this extension and we need to get it done by the deadline for the funding. Your department needs to make sure that there is at least the basic extension completed through the College Ave., Medford stop. Please do not let this project not happen. Somerville is only 4 square miles. I don't understand why the MBTA cannot locate an alternative site for their garage/repair lot in a community that has more land to spare.

Happy New Year.

Sara

Sara Rosenfeld
rosenfeld.sara@gmail.com
cell: 617-939-7277

Information from ESET Smart Security, version of virus signature database 4752 (20100107)

The message was checked by ESET Smart Security.

http://www.eset.com

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I-269-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-269-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Johnson, Holly (EEA)

From: Carolyn Ross [falathwen@gmail.com]
Sent: Thursday, January 07, 2010 7:12 PM
To: Johnson, Holly S (ENV)
Subject: Comment EEA #13886

I-270-001 I-270-002

Hello. I am a resident of Somerville who commutes via an MBTA bus route to my workplace near Lechmere Station. I would like to comment in particular about pedestrian access to the relocated Lechmere Station. I looked through the East Cambridge Planning Team's pedestrian-friendly area design ideas and was impressed with their thoroughness, but I wanted to note that many people making the crossing to get to the station from the Galleria Mall or the Courts and Registry are elderly or mobility impaired. It would be very important to make more generous estimates than those given in the design suggestions about the time needed to make a crossing as wide as Monsignor O'Brien Highway particularly during the many months of challenging weather conditions. I support the suggestion of having bus route loops that minimize the need for crossing the highway by having both inbound and outbound connections on the Cambridge Street side of the highway, specifically the suggestion that the routes will all end by turning left on First Street from Cambridge Street and then crossing the O'Brien Highway into the bus terminal before traveling west through the terminal, exiting by way of Water Street and then turning right onto O'Brien Highway.

-Carolyn Ross
7 Dartmouth Street
Somerville

1

I-270-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-270-002

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

January 5, 2010 Fax to 617-626-1181 P.1 of 2

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles:

I-271-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial, and cost-effective manner—that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More important for your review, the DEIR was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and to require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This provision means that the Route 16 segment and station may never be built.**

There are many, many problems with the two-phase approach, including:

- **Risk.** Without an identified funding source there is a very high probability that the Route 16 segment and station will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed to be a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own

I-271-001

Please see Comment Letter I-002.

estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

- **Project Management.** There are significant efficiencies to be gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice.** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate.** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. **College Avenue should not be a terminus.** The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station's operations and traffic volume; and the potential environmental damage ts of serious concern.
3. **The Route 16 station design is inadequate.** The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

In summary, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be. I will very much appreciate your constructive attention to these important needs.

Sincerely yours,

Sallyann Roth
137 Brooks Street
Medford, MA 02155

Johnson, Holly (EEA)

From: Stephanie D Rubino [sdrubino@gmail.com]
Sent: Friday, January 08, 2010 1:59 AM
To: Johnson, Holly S (ENV)
Cc: Michele Rubino
Subject: Concern about Green Line Extension from Glass Factory Resident
Attachments: DEIR letter unit 602 Rubino.doc

Stephanie and Michele Rubino
301 West G Street, Unit 109
San Diego, CA 92101

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

We have been owners at the Glass Factory Condominiums since 2005 (unit 602). We were excited to buy a property in the heart of an up and coming neighborhood. The original plans included a large park behind our building among new commercial and residential buildings. As residents of the Glass Factory through summer 2008, we followed the evolution of those plans during regular board meetings for residents. We are shocked to learn about the poor status of the Green Line Extension Project, especially as we begin to think about the resale value of our unit.

I-272-001 Our unit faces north toward the proposed station and rail line extension. The station in its current design is too close to our building (right behind our outdoor parking) and will block light and obstruct views. The station's proximity means our tenants will have to endure an exorbitant amount of noise and vibration from the passing trains, buses, cars (of commuters parking in the huge lot there), and general noise and pollution from the hustle/bustle of riders. We feel strongly that the station should be moved toward East Street away from our building.

I-272-002 We are also concerned about ceding the limited green space and trees we currently have behind our building.

I-272-003 Overall, as compared with the previous design, this one seems of much poorer quality in terms of aesthetics and function. Nobody wants to buy a condo next door to an eyesore and traffic nightmare.

We look forward to working with our building action committee to help steer this project in a better direction for the sake of the entire neighborhood.

:erely,

I-272-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-272-002

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

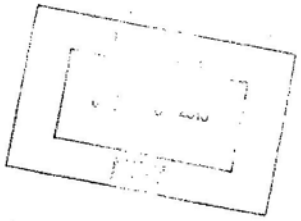
I-272-003

Please see response to Comment I-272-001.

Stephanie & Michele Rubino
617-818-0162 cell / 617-230-6162 cell

#5

January 5, 2010



Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-273-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own

I-273-001

Please see Comment Letter I-002.

estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.



Dina Rudick
75 Capen St. #2
Medford, MA 02155

January 5, 2010

RECEIVED

JAN 8 2010

MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report for the Green Line Extension project to Medford, EEA #13886.

I am very strongly in support of the Greenline extension because I believe it will provide enormous transportation benefit to West Medford where I am a resident. I was however troubled to learn that the Draft Environmental Impact Report recommends not continuing the extension past College Avenue at Tufts University area and relegating the continuation of the Green Line to Route 16 to a later project phase.

I-274-001 The reason for delaying construction of a terminus station at Route 16 is apparently cost. It seems to me that it is much more efficient and therefore cost efficient to include it in a single phase of construction. I also firmly believe that there are design possibilities for a Route 16 station that would mitigate costs and minimize the impact on nearby businesses and residences. I support the analysis produced by the Medford Green Line Neighborhood Alliance and would strongly support either their alternative design for the Route 16 station or a comparable alternative that accomplishes the same results.

I-274-002

The draft report makes clear that a Route 16 terminus (described as the "preferred full-build alternative") provides the maximum benefits in terms of ridership, reduced vehicle miles in the area served, and the environmental impact and economic benefit to businesses in the area. I agree, and feel strongly that further analysis should be undertaken to realize this alternative.

I-274-003 Therefore, please DO NOT accept the Draft Environmental Impact Report in its current form. The Massachusetts Department of Transportation should be instructed to undertake further environmental analysis in order to optimize the Green Line extension project that I believe must include a terminus at Route 16 in Medford.

Thank you for your consideration.

Roy Rudolph

78 Chandler Road
Medford, MA 02155

I-274-001

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

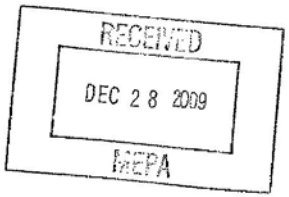
I-274-002

All stations for the Green Line Extension project were designed to comply with the MBTA's design standards. The station descriptions in the DEIR/EA identify the full extent of potential impacts of the Project on the surrounding area, in compliance with MEPA review requirements. Although a redesigned Mystic Valley Parkway / Route 16 station may achieve some reductions in property takings, there is still much evaluation of design, operations, and environmental impacts that would be required. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-274-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Ian A. Bowles, Secretary
Executive Office of Energy and Environmental Affairs
MEPA Office
Attention: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St., Suite 900
Boston, MA 02114



December 28, 2009

Dear Secretary Bowles,

My name is Laurel Ruma and I am an immediate abutter to the planned College Avenue/Tufts University station on the proposed Green Line Extension (GLE). From my living room window at the end of Burget Avenue, I can see, feel, and hear the commuter, Amtrak, and freight trains (herein referred to as the industrial trains) pass by 40 feet away. I shut my blinds to avoid the light pollution from the Tufts parking garage through the trees, hear the pedestrians voices carry as they walk down Boston Avenue, and can tell what time it is with the passing of the early morning commuter trains. We lived in Medford as renters for five years and then had the opportunity to buy our modest home here three years ago. The GLE was a factor in our purchase--we are excited to live in a neighborhood with public transportation, and direct access to Boston will be a jewel in Medford's crown. We are not from here, but we chose to live here, we are committed to Medford. We have fantastic neighbors, a pretty good relationship with Tufts, and we support the Green Line Extension to Route 16/Mystic Valley Parkway (herein referred to as Rt. 16) and wholesale reject a College Avenue/Tufts University terminus ("temporary" or not).

I-275-001

I have been learning about the project and attending the GLE Advisory and public meetings for almost two years. It's no small feat to leave work early to get to a 4pm meeting, or even a 6pm meeting, but we do it because it's important—because we are investing in a better Medford, a better transit system, and a better Massachusetts. I understand that the project is what it is—there is no tunnel, no elevated-monorail, and no way around reconstructing all those bridges. MassDOT (well, here I mean Kate Fichter) has been responsive to our requests for more information and to attend neighborhood meetings. I've organized two Burget Avenue neighborhood meetings for Tufts and abutters on Burget, Charnwood, Hume, and Brookings streets, as well as our neighbors in South Medford. This has meant leafleting every house twice and stapling signs to telephone poles—it is not easy to get in touch with people, but again, I do it because this is important. As MassDOT has said: this is a 100-year project and I am determined to help make it the best project possible, which means a transparent and open planning, procurement, construction, and documentation process. We're not quite there yet.

I-275-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

See, I'm a reasonable person. I want MassDOT to be fair to me, my neighbors, and the citizens who will benefit from the construction of the GLE to Rt. 16. Therefore, it is my position that MassDOT must construct the Preferred, Full-Build Alternative for the Green Line extension to Medford with a terminus station at Route 16/Mystic Valley Parkway in one phase by December 31, 2014, in order to achieve the maximum environmental benefits of the project and to fulfill the requirement to serve the Hillside. For these reasons, the Draft Environmental Impact Report (DEIR) should not be accepted as the Final Environmental Impact Report (FEIR), because the DEIR fails to fulfill the requirements of the December 1, 2006 MEPA Certificate that determined the scope of the project.

I-275-002

The MEPA Certificate requires the GLE to go to the Medford Hillside. And according to the people that live here in Medford, hundreds of years of maps, and really everyone except MassDOT, Medford Hillside is defined as Winthrop Street/Boston Avenue to Rt. 16/Boston Avenue. Tufts University and the intersection of Boston and College Aves (remember, that's where I live) does not constitute the Medford Hillside. The only build alternative that includes the Medford Hillside is the full-build option to Rt. 16.

Now, let's take a look at the proposed station stops for all of Medford:

- The Ball Square station will be on the border of Somerville and Medford. It's a lovely square with lots of businesses, so there's enormous economic possibility as well as many neighborhoods that will easily access the station. The station at Ball Square will serve Somerville.

- The College Avenue/Tufts University station will be at the base of Tufts University. The surrounding land to the station stop is all owned by Tufts University (there's a map of this in the DEIR, forgive me for not pointing it out, but that document is an unholy mess). There are no economic opportunities here, except for and by Tufts University. The Burget Avenue neighborhood is the only neighborhood that directly abuts Tufts. The Tufts students and adjoining neighborhoods will access this station by foot and bike. However, the only direct access my neighborhood has to College/Boston Avenues is to cut across Tufts property (a busy parking lot). There is no guarantee that Tufts will keep this "bunny path" open to random citizens considering the liability. The College Avenue/Tufts University station will serve Tufts.

- The Rt. 16/Mystic Valley Parkway station will be in a commercial area at the junction of Rt. 16 and Boston Avenue. This area is a unique confluence of Arlington, Medford, and Somerville. The environmental justice populations in this area are many and the possibilities to take cars off the road are the greatest here. With a viable Rt. 16 plan, one can easily imagine a fantastic urban center where people shop and access by bike or foot. The Rt. 16/Mystic Valley Parkway station will truly serve Medford and the Medford Hillside as directed by the MEPA certificate.

I-275-002

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

So, why not go along with MassDOT's plan for a two-phase plan with a "temporary" terminus at College Ave/Tufts University? There are many reasons:

1) It doesn't serve the Medford Hillside, or really Medford at all.
2) There is no boon to having a "temporary" terminus at College Ave/Tufts University. We have an exquisite once-in-a-lifetime opportunity to improve public transportation to a large community and stopping at College Ave/Tufts University is a waste—a downright waste of an opportunity for MassDOT to truly serve many, many citizens for many decades to come.
3) The traffic is horrendous at College and Boston Avenues. I know the City of Medford has pointed out in its comments that this 4-legged intersection needs to be rehabilitated, but that's putting it mildly. There needs to be drop-off areas for both sides of Boston and College Avenues (east and west) as well as north and south bound. Yes, there must be eight drop-off areas to properly serve this station stop. There also must be more bike racks than the now-proposed 40-bike parking. To think that only 40 people will ride their bikes to this station every morning and expect to find parking is absurd. The point of this project is to take cars off the road—therefore, an emphasis on bike parking is mandatory. Pedestrian walk-up access is also a very important subject. Cars do not stop for pedestrians at the College and Boston Avenue intersection as it is now. One option for better enforcement could be red-light cameras that issue tickets to offenders.
4) The College Avenue/Tufts University station stop is in a residential neighborhood. The burden of having back-to-back construction projects from now until 2020 is unacceptable. A one-phase project to Rt. 16 equally distributes the burden and creates more environmental benefits for the entire corridor. Actually, the environmental benefits of terminating at College Avenue/Tufts University are greatly reduced compared with extending the line all the way to Rt. 16.
5) My neighborhood mitigation needs will not be the same as the abutters at Ball Square. There needs to be a line item in the budget for noise/sound/light mitigation for each station stop in the FEIR. The current DEIR does not address the actual budget costs for mitigation, just estimates and recommendations. I endorse the full noise/vibration/light mitigation options as outlined in the DEIR, the cost of which must be included in the FEIR.
6) MassDOT has not had a College Ave/Tufts University station stop meeting with the neighborhood or city of Medford. We have seen only one plan for the "temporary" terminus at College Ave/Tufts University. This is unacceptable.
7) The train storage and staging area at the College Ave/Tufts University "temporary" terminus will put an undue burden on the Burget Avenue neighborhood. Remember, I already hear the 4am commuter train. With the two-phase plan I'll be able to watch the trains pile up at 4am as they start the day's run and as they idle at 12am after dropping off the last passengers. If there's a disabled train, it will be sitting on the other side of my fence until retrieved and hopefully towed back to the maintenance facility, but could also be worked on right there.
8) MassDOT has not explained to the abutters on Burget, Brookings, and Charnwood Streets that they may not get any mitigation relief at all even though

the industrial tracks are moving closer to their homes. Only a portion of Burget, and none of Brookings or Charnwood Streets will have sound barriers, but they will be taking on the brunt of the "temporary" terminus construction. With a full-build to Rt. 16, these neighbors will get the proper mitigation efforts that are due to them. The "temporary" terminus plan pits neighbors against neighbors. I realize we are not mitigating for the industrial train use, but if MassDOT is putting in sound barriers, it should line the entire corridor with them.

9) Let's be honest. The likelihood of MassDOT going back after the first-phase of construction is done (or even during) and starting the second-phase is not only unrealistic, but improbable and, frankly, a waste of money. The EIR is being done now, and it needs to properly reflect the project in its entirety to Rt. 16. To go back and do a new EIR and spend more money to build a mile-long section from College Ave/Tufts University to Rt. 16 is not going to happen. Again, we have an opportunity now to do this right the first time.
10) The two-phase project has never been presented to the public at large in a meeting. The last public meeting showed a College Ave/Tufts University, a Brookings Avenue stop, a Winthrop stop, and a Rt. 16 stop. The city has not been presented a College Ave/Tufts University only project. Right now, as I see it, this project doesn't have a physical starting point nor a terminus—the DEIR cannot be considered the FEIR until those two crucial points are settled.

Before the FEIR is released, I would like to see:

I-275-003
1) A public hearing for the proposed "temporary" terminus at College Ave/Tufts University and a separate hearing for Rt. 16 terminus, just like the one held for the maintenance facility in Somerville.

I-275-004
2) A very complete plan showing all the impacts (traffic, environmental, and mitigation, including the staging and storage of trains) for the surrounding neighborhood at the College Ave/Tufts University and Rt. 16 station stops specifically. The current DEIR barely examines the Rt. 16 stop.

I-275-005
3) Three different plans for the Rt. 16 terminus. None of which should contain the seizure of 200 or 222 Boston Avenue. These buildings provide revenue and jobs to the city. They could also be the base of a significant revitalization. MassDOT has never submitted an honest plan for Rt. 16 during this entire process. We've seen plans for a parking garage, a maintenance facility, and now MassDOT's own publicly-admitted "worst-case scenario" of the seizure of buildings at 200 and 222 Boston Avenue.

I-275-006
4) MassDOT meet with the mayor of Medford and city council to once and for all explain the project and what the effects it will have on the city.

I-275-007
5) A true budget of what the project will cost.
6) The true costs and requirements of implementing a two-phase plan, including inflation.

Thank you for your time. Feel free to stop by anytime for coffee and I'll give you a tour of the neighborhood.

Sincerely,

I-275-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-275-004

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-275-005

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-275-006

MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses. This will help ensure compliance with legal requirements and, to the extent feasible, consistency with planning and other projects.

Laurel R.T. Ruma
149 Burget Avenue
Medford, MA 02155

CC:
Mayor Michael McGlynn, Medford
Medford City Council
Rep. Carl Sciortino
Senator John Kerry
Representative Edward Markey

I-275-007

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

DEC-17-1996 15:29 P.01

Page 1 of 2, Transmitted by fax to 617-626-1181 January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles:

I-276-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial, and cost-effective manner—that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More important for your review, the DEIR was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and to require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. **This provision means that the Route 16 segment and station may never be built.**

There are many, many problems with the two-phase approach, including:

- **Risk.** Without an identified funding source there is a very high probability that the Route 16 segment and station will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed to be a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development

I-276-001

Please see Comment Letter I-002.

at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies to be gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice.** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate.** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station's operations and traffic volume; and the potential environmental damage ts of serious concern.
3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

In summary, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be. I will very much appreciate your constructive attention to these important needs.

Sincerely yours,

Kimberly Rzepecki
135 Brooks Street
Medford, MA 02155

55 Otis Street
Cambridge, MA 02141
617-864-2643
617-864-8403
c. 617-407-5649

Betty Lee Saccoccio

January 7, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Email: Holly.S.Johnson@state.ma.us

Dear Ms. Holly Johnson:

I-277-001

I am writing to voice my concerns regarding the Green Line Extension, #13886. I am presently limited with mobility and am receiving services from the Ride. I anticipate using the T over the next year. However, I am concerned with the proposed access plan to the East Cambridge Neighborhood. I ask how I am to cross a highway safely? For this reason alone, I am requesting a foot bridge or over the street access similar to that of Cambridge Street entering Harvard Square.

Please note that there are major housing units dedicated to seniors and Persons with Disabilities in East Cambridge. Safety and accessibility should be the T's major concerns.

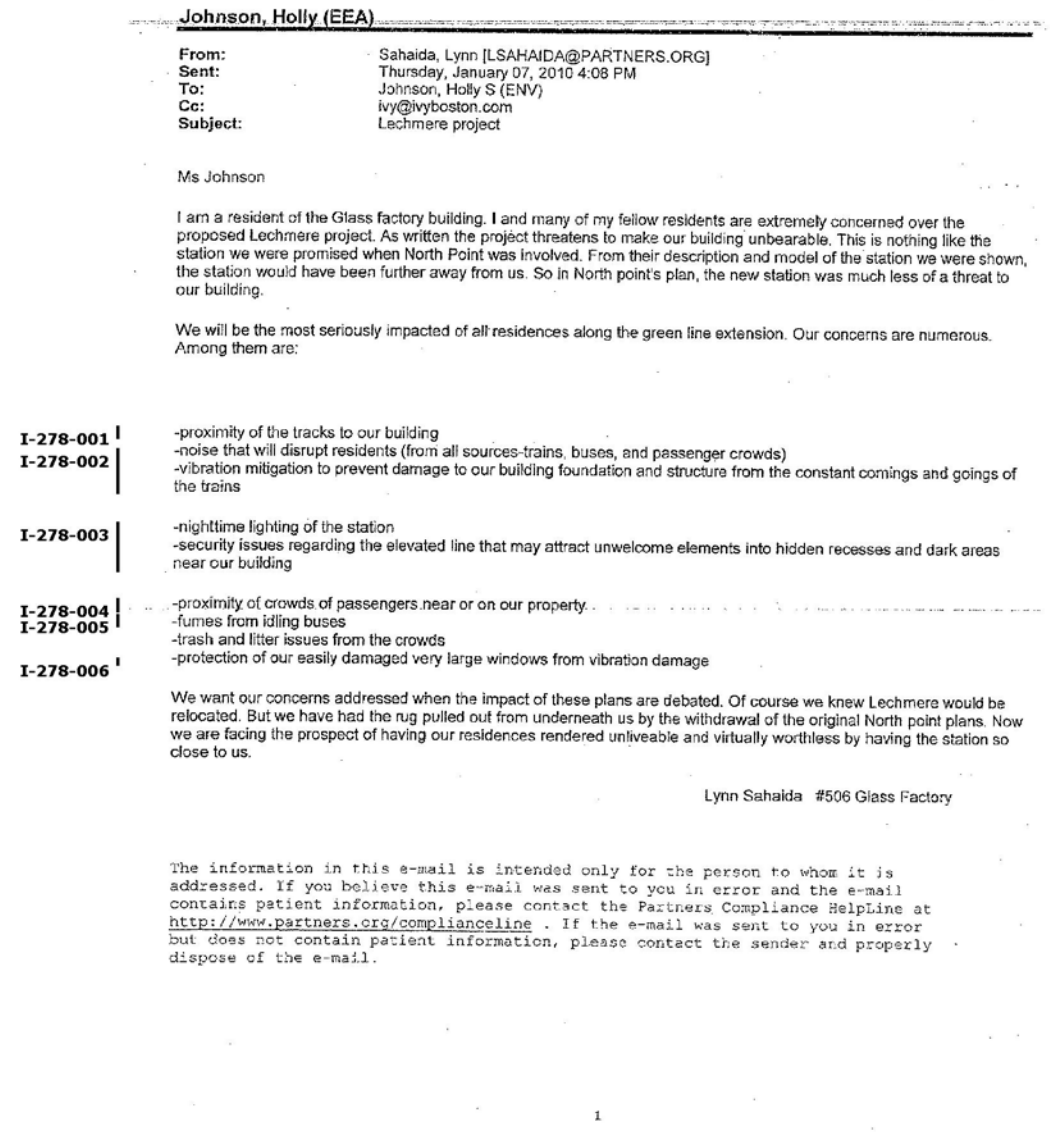
I trust you will address my concern. Another option might be to leave the T where it has been for the past century or change the design to accommodate the neighborhood.

Yours truly,

Betty Lee Saccoccio

I-277-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.



Johnson, Holly (EEA)

From: Sahaida, Lynn [LSAHAIDA@PARTNERS.ORG]
Sent: Thursday, January 07, 2010 4:08 PM
To: Johnson, Holly S (ENV)
Cc: ivy@ivyboston.com
Subject: Lechmere project

Ms Johnson

I am a resident of the Glass factory building. I and many of my fellow residents are extremely concerned over the proposed Lechmere project. As written the project threatens to make our building unbearable. This is nothing like the station we were promised when North Point was involved. From their description and model of the station we were shown, the station would have been further away from us. So in North point's plan, the new station was much less of a threat to our building.

We will be the most seriously impacted of all residences along the green line extension. Our concerns are numerous. Among them are:

I-278-001 -proximity of the tracks to our building
I-278-002 -noise that will disrupt residents (from all sources-trains, buses, and passenger crowds)
-vibration mitigation to prevent damage to our building foundation and structure from the constant comings and goings of the trains

I-278-003 -nighttime lighting of the station
-security issues regarding the elevated line that may attract unwelcome elements into hidden recesses and dark areas near our building

I-278-004 -proximity of crowds of passengers near or on our property
I-278-005 -fumes from idling buses
-trash and litter issues from the crowds
I-278-006 -protection of our easily damaged very large windows from vibration damage

We want our concerns addressed when the impact of these plans are debated. Of course we knew Lechmere would be relocated. But we have had the rug pulled out from underneath us by the withdrawal of the original North point plans. Now we are facing the prospect of having our residences rendered unliveable and virtually worthless by having the station so close to us.

Lynn Sahaida #506 Glass Factory

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at http://www.partners.org/complianceline . If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

1

I-278-001

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-278-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-278-003

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

Along the back side of the Glass Factory, fencing is currently proposed to minimize trespassers crossing the existing Glass Factory parking area and will be further evaluated during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

As reported in FEIR Section 5.4, the existing outdoor-to-indoor noise reduction of the Glass Factory Condominiums has been measured and the resulting interior noise level projections have been assessed against appropriate interior noise criteria. As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. These proposed measures include a noise barrier on the elevated structure near Glass Factory.

I-278-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-278-005

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

I-278-006

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Page 1 of 2, Transmitted by fax to 617-626-1181 January 5, 2010

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JAN 8 2010

MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-279-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial, and cost-effective manner—that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More important for your review, the DEIR was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and to require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This provision means that the Route 16 segment and station may never be built.**

There are many, many problems with the two-phase approach, including:

- **Risk.** Without an identified funding source there is a very high probability that the Route 16 segment and station will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed to be a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development

I-279-001

Please see Comment Letter I-002.

at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies to be gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice.** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate.** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station's operations and traffic volume; and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

In summary, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be. I will very much appreciate your constructive attention to these important needs.

Sincerely,

Carole Samworth
137 Brooks Street
Medford, MA 02155

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles:

I-280-001 | I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.
The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.

- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a

I-280-001

Please see Comment Letter I-002.

single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

• **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

• **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

• **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Sincerely,
Michael Sandler 
44 Michael St.
Arlington MA 02474

I-281-001

Please see Comment Letter I-002.

RECEIVED

JAN 8 2010

MEPA

January 5, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

I-281-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014. The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities. The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.** There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

• **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

• **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

• **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

• **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

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3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you,

Susan Schmidt

Susan Schmidt
12 Liberty Ave.
Medford, MA 02155

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

EEA #13886

Dear Secretary Ian Bowles,

I am both a supporter of and a user of public transportation. I welcomed the decision to extend the Green Line and give Somerville long overdue access to the MBTA rail system. However, the plan as outlined in the DEIR has triggered concerns about the potential negative impact on my community, both Somerville as a whole and in particular, the Brickbottom Artist's Studios, where for the past 21 years, I have worked, lived and raised a family. It is important that the project is built right for the future and that the plan includes further environmental assessments, mitigation commitments and a more holistic view of our metro transportation infrastructure with the station designs, bus links, pedestrian bicycle access, community paths and, and integration with automobile corridors, particularly McGrath/O'Brien highway.

I-282-001 The entire Brickbottom Artist building is predicted to have noise and vibration levels that go beyond what is considered severe because of the extreme proximity of the proposed train tracks and the mitigation as outlined in the DEIR is both vague and insufficient.

I-282-002 Our lofts are zoned as live/work spaces, with over two hundred residents, and we need both the construction of and the daily coexistence with the trains not to impinge on our commercial and cultural endeavors or to be detrimental to our quality of life. While all three buildings and our outdoor communal space are listed in the DEIR as being severely impacted by noise and vibration, the mitigation measures to the Brickbottom community seem insufficient and vague– soundproofing is allocated to only 40 out of the 155 residences. I urge MassDOT to take every step in lessening the environmental impact of the extension not only in my neighborhood, but in the other close residential abutters, such as the Glass Factory. While the existing rail bed might be the easiest path for the Green Line, the environmental impact on the residences should be taken in consideration, and every effort should be made to site the line further away than the proposed 19 feet at Brickbottom to lessen the impact.

I-282-003 MassDot needs to establish a clear procedure, incorporating community representation, for determining and meeting noise and vibration targets and compensation if those targets are not met. A full assessment of the Brickbottom area is needed create an accurate baseline for current noise, vibration and air quality in order to calculate the extension's full impact. Additionally, funding needs to be in place for future needs to enable the MBTA to provide adequate upkeep, repair and employ new technologies as they become available to keep the mitigation infrastructure effective.

I-282-004 I oppose the Yard 8 location for both the maintenance facility and storage yard. The plan fails to meet the Somerville's criteria for quality of life, transportation access and economic development. The impact from these two facilities would be an addition burden both to the Brickbottom Artist residents and to the Somerville community as a whole. The proposed site would negatively impact the quality of life for the residential abutters. It also places an unfair economic burden on Somerville, which already houses the large commuter rail maintenance facility. The entire community has been unanimous in their disapproval of the plan, and I encourage MassDOT to continue to pursue further options. While both the Mirror Scheme H and Scheme L would lessen the impact on my immediate neighborhood, I believe that MassDOT should achieve operational efficiencies by utilizing the existing 47 acres already committed to train infrastructure, the MBTA Boston Engine Terminal, rather than creating a second distinct facility in Somerville.

I-282-001

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-282-002

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-282-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-282-004

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources.

I-282-005 With Somerville being the most densely populated municipality in New England, the proposed storage yard also must be designed in a way that integrates with the neighborhood. It should be scaled down and accommodate the number of cars necessitated by the extension, essentially half the currently proposed number in the DEIR. I've been to Riverside and also viewed the bus depot close to the Forest Hill station. These are both complete eyesores, with dirty lots surrounded by chain link fence topped with razor wire. If the storage yard needs to be sited in Somerville, it must be done in a way that lessens the visual impact on the dense neighborhood and its evolving future.

I-282-006 Likewise, the station design needs to be appropriate to the dense metro quality of Somerville. The proposed stations are more kin with the suburban stations one see in Needham than the meto stations of Boston. It is important that the station be designed to promote pedestrian, bicycle and bus access. MassDot needs to have a fuller planning process and promote designs that are aligned with the current density and anticipate future development. The designed car drop off area at the Brickbottom station will only exacerbate traffic problems that already exist at the Joy St. and Washington intersection and will impede access/egress in my neighborhood, The station plans need to be developed with community input.

I-282-007

I-282-008

Both cars and pedestrians currently use the Somerville Avenue extension, the one-way street (listed as unnamed) that runs along and then under the McGrath highway and borders Russell's and the tow lot that is marked for acquisition for the extension. The DEIR needs to commit to our continued ability to access our neighborhood through this important route and provide more information about the proposed land acquisition.

I-282-009 The state needs to implement an integrated transportation plan that aligns the Green Line extension with pedestrian and bicycle access, along with planning improvements to the McGrath Highway. The Green Line extension needs to be implemented in a way that improves the quality of life for our community, now and for the future, while facilitating transportation in the Commonwealth.

Alyson Schultz

Alyson Schultz
1 Fitchburg St C209
Somerville MA
02143

MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

I-282-005

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-282-006

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-282-007

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-282-008

MassDOT and the MBTA conducted a series of public workshops to gather input on land use and facility design issues from the communities. The workshops were organized around facility locations or groups of locations. All were well-advertised, open to the public and in accessible venues.

I-282-009

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-Semm

JANUARY 8, 2010

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JAN 8 2010

MEPA

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-283-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and

I-283-001

Please see Comment Letter I-002.

neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

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To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.



AMY SEMMES
120 AUBURN ST
Medford, MA 02155
amy@semmesdesign.com

Johnson, Holly (EEA)

From: Robin Severino [rbnseverino@yahoo.com]
Sent: Monday, January 04, 2010 8:45 AM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension

January 4, 2010

Secretary Ian Bowles

Executive Office of Energy and Environmental Affairs

MEPA Office

Attn: Holly Johnson, MEPA Analyst

EEA #13886

100 Cambridge Street, Suite 900

Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-284-001

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred

I-284-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

I-284-002

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

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There are many, many problems with the Phase II approach, including:

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- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the

I-284-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

I-284-003

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.

I-284-004

- **Environmental Justice:** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.

I-284-005

- **Legal Mandate:** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

I-284-006

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of

I-284-003

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-284-004

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-284-005

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-284-006

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR

I-284-006

serious concern.

I-284-007

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Robin Severino

Robin Severino

46 pinkham Road

Medford, MA 02155

Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-284-007

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: John Shayeb [john.shayeb@1199.org]
Sent: Friday, January 08, 2010 11:26 AM
To: Johnson, Holly S (ENV)
Subject: Green line extension

Hi Holly,

I-285-001

How are you today? I just wanted to write a quick note to you and let you know that I support the Green line extension to Rt. 16 in Medford. My wife and I just became first time home buyers in the City; the Green line extension was one of the reasons for this.

Feel free to contact me if you have any questions.

Thank you,

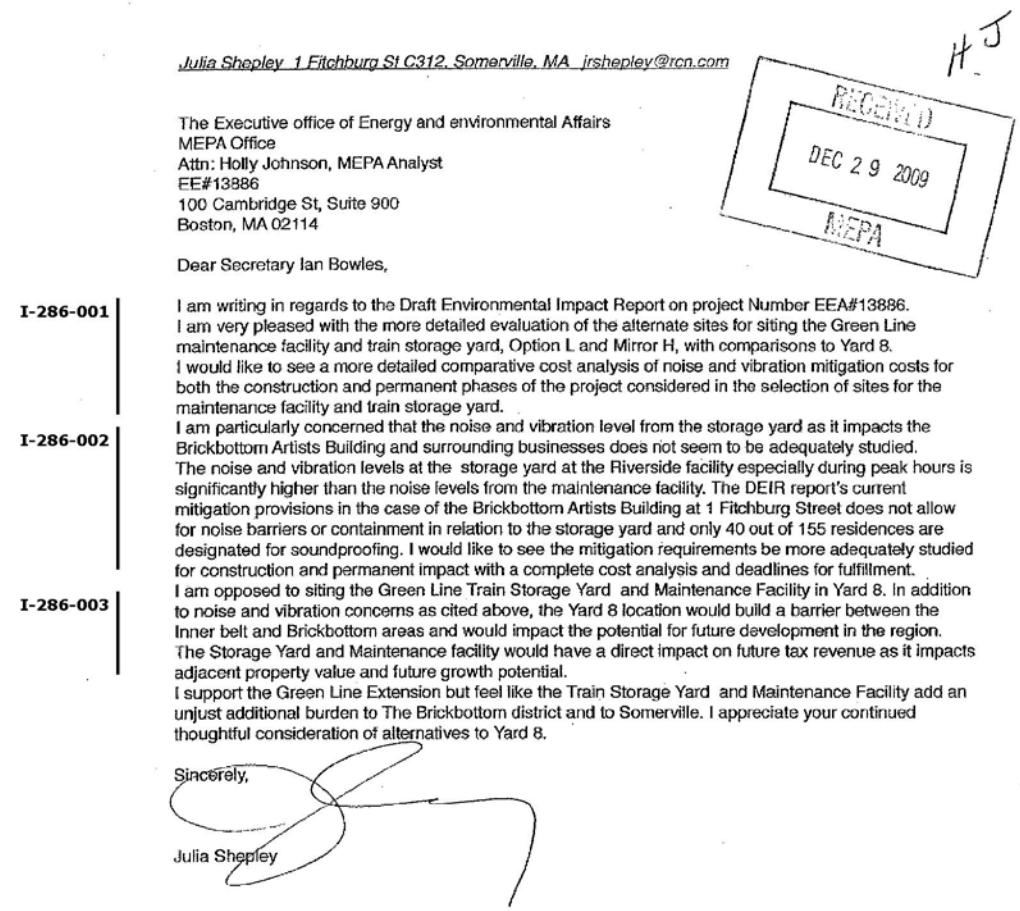
John Shayeb
Organizer
1199SEIU -UHWE
150 Mt. Vernon Street
Suite 300
Dorchester, MA 02125

Direct number (617) 284-1181
Fax (617) 474-7150

1

I-285-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



Julia Shepley 1 Fitchburg St C312, Somerville, MA jrshepley@rcn.com

HJ

RECEIVED
DEC 29 2009
MEPA

The Executive office of Energy and environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I-286-001 I am writing in regards to the Draft Environmental Impact Report on project Number EEA#13886. I am very pleased with the more detailed evaluation of the alternate sites for siting the Green Line maintenance facility and train storage yard, Option L and Mirror H, with comparisons to Yard 8. I would like to see a more detailed comparative cost analysis of noise and vibration mitigation costs for both the construction and permanent phases of the project considered in the selection of sites for the maintenance facility and train storage yard.

I-286-002 I am particularly concerned that the noise and vibration level from the storage yard as it impacts the Brickbottom Artists Building and surrounding businesses does not seem to be adequately studied. The noise and vibration levels at the storage yard at the Riverside facility especially during peak hours is significantly higher than the noise levels from the maintenance facility. The DEIR report's current mitigation provisions in the case of the Brickbottom Artists Building at 1 Fitchburg Street does not allow for noise barriers or containment in relation to the storage yard and only 40 out of 155 residences are designated for soundproofing. I would like to see the mitigation requirements be more adequately studied for construction and permanent impact with a complete cost analysis and deadlines for fulfillment.

I-286-003 I am opposed to siting the Green Line Train Storage Yard and Maintenance Facility in Yard 8. In addition to noise and vibration concerns as cited above, the Yard 8 location would build a barrier between the Inner belt and Brickbottom areas and would impact the potential for future development in the region. The Storage Yard and Maintenance facility would have a direct impact on future tax revenue as it impacts adjacent property value and future growth potential.

I support the Green Line Extension but feel like the Train Storage Yard and Maintenance Facility add an unjust additional burden to The Brickbottom district and to Somerville. I appreciate your continued thoughtful consideration of alternatives to Yard 8.

Sincerely,

Julia Shepley

I-286-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

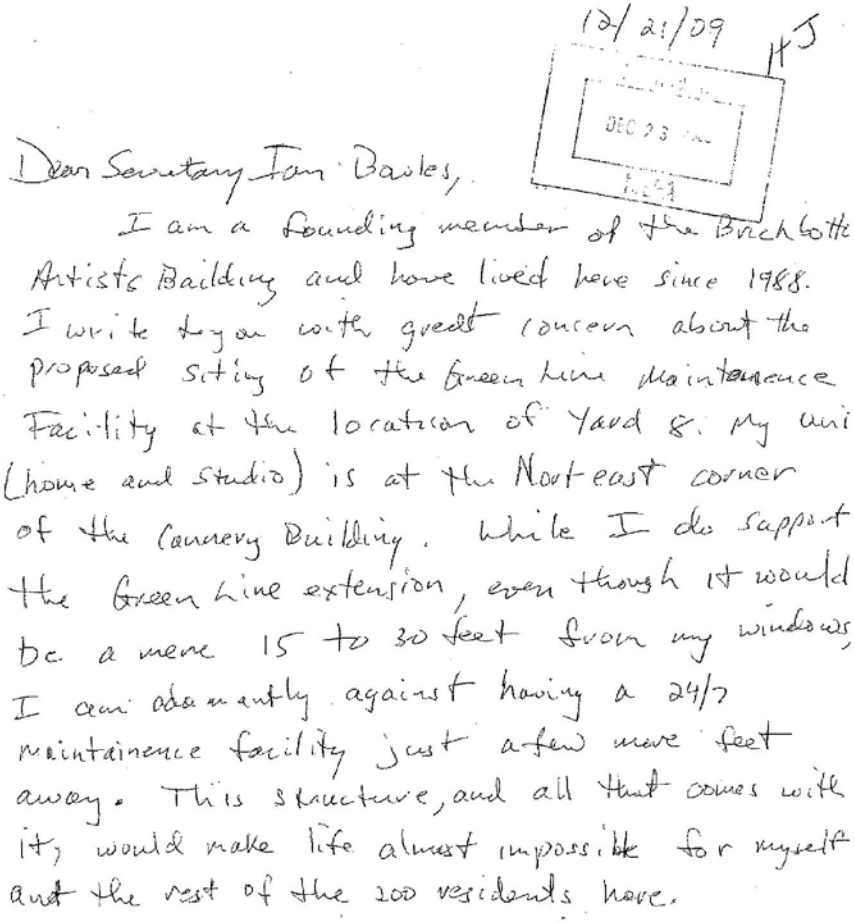
I-286-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-286-003

An expanded technical and environmental analysis of the light rail

storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



12/21/09

DEC 23

Dear Secretary Ian Bowles,

I am a founding member of the Brickbottom Artists Building and have lived here since 1988. I write to you with great concern about the proposed siting of the Green Line Maintenance Facility at the location of Yard 8. My unit (home and studio) is at the Northeast corner of the Gannery Building. While I do support the Green Line extension, even though it would be a mere 15 to 30 feet from my windows, I am adamantly against having a 24/7 maintainence facility just a few more feet away. This structure, and all that comes with it, would make life almost impossible for myself and the rest of the 200 residents here.

I-287-001

I-287-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

There are ligitimate alternatives (Scenario H and Option L) to yard 8. I am hoping that the Executive Office of Energy and Environmental Affairs will take yard 8 off the list of potential sites. Thank you.

Sincerely,

David Sholl

David Sholl
C322 Brackbottom Bldg.
1 Fitchburg St
Somerville MA.

Johnson, Holly (EEA)

From: Laurel Siegel [laurelsiegel@comcast.net]
Sent: Friday, January 08, 2010 12:40 PM
To: Johnson, Holly S (ENV)
Subject: Comment on DEIR for the Green Line Extension project to Medford, EEA #13886
Attachments: green line letter.doc

Ms. Johnson –

Please see the attached letter providing comments on the Draft Environmental Impact Report for the Green Line Extension project to Medford, EEA #13886.

Thank you.

Laurel Siegel

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-288-001

As a resident of the Medford Hillside community, I strongly support the Green Line extension, but I also urge that that it be built in a single phase, with the terminus station at Mystic Valley Parkway/Route 16 being completed by the end of 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building and funding the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

I-288-002

For several reasons, the proposed division of the project into two phases does not comply with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

By dividing the project into two phases, the state is not meeting its obligation to provide public transit services to Medford Hillside by December 31, 2014. The Medford Hillside community has historically been defined to cover the corridor along Boston Avenue reaching from Warner Street to Route 16. The location at College Avenue covers only the first third of that corridor, ending nearly a full mile from the outer boundaries of the Hillside community, and therefore would not satisfy this legal obligations to serve the community by the 2014 deadline.

Moreover, there is a very real risk that the Route 16 station will never in fact be built, as the DEIR has not identified any funding source for the completion of the proposed second phase to build that station. If this were to occur, a terminus at College Avenue would create a number of deficiencies, including:

I-288-003

- A College Avenue terminus fails to adequately meet the obligation of serving the environmental justice population, which would be better served by a terminus at Route 16.

I-288-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-288-002

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-288-003

The Proposed Project offers substantial benefits to environmental justice communities and serves the majority of Study Area environmental justice population zones. As described in DEIR/EA Section 5.4, Environmental Justice, impacts to environmental justice populations would be neither severe nor disproportionate with any of the Build Alternatives.

I-288-004

- The proposed College Avenue station is located adjacent to the already overburdened and difficult-to-navigate intersection of College and Boston Avenue, and siting a terminus there, even temporarily between the construction of the two phases, would only exacerbate the issues at that intersection.

- The intent of this project is to improve air quality by reducing the number of vehicles traveling in the Medford Hillside community. A College Avenue terminus, however, may in fact increase vehicular traffic by bringing an increased number of vehicles onto the narrow roadways of the community to drop off passengers, and also increased bus trips to and from the terminus location.

- The proposed location of the College Avenue is a densely-populated, residential neighborhood, making it ill suited to serve as a terminus location. The more heavily commercial neighborhood of the proposed Route 16 station is more appropriate for a terminus station. Its proximity to Route 16 also creates better opportunities for connectivity to other forms of transportation, and transit oriented development.

I-288-005

In addition, even if funding is found for the second phase to complete the station at Route 16, the two phased approach will significantly increase the costs of the project over a single-phased approach.

I-288-006

Finally, even if built, the proposed Route 16 station design contained in the DEIR is inadequate. MassDOT has acknowledged that the design presented is a "worst case scenario". Alternative designs (such as the one proposed by the Medford Green Line Neighborhood Alliance) would eliminate the need for acquiring two major commercial properties, significantly reducing the property tax and job losses in the community. Such alternative designs should be presented for public review and comment.

In short, a two-phased approach to the Green Line extension is unacceptable, and does not comply with the legal mandate for the project. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

Based on the foregoing, I strongly urge you to not accept the DEIR as the Final EIR and to require further environmental analysis of the project by MassDOT.

Thank you for your attention.

Yours very truly, .

Laurel Siegel
39 Chester Avenue, Medford

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I-288-004

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-288-005

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-288-006

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Maria Simoneau [mariasimoneau@yahoo.com]
Sent: Friday, January 08, 2010 12:42 PM
To: Johnson, Holly S (ENV)
Cc: Garballey, Sean (HOU); Donnelly, Kenneth (SEN)
Subject: Please extend Green Line to Route 16

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs--MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886

Dear Secretary Bowles:

I'm very much in favor of extending the Green line to Route 16. As an Arlington resident, a T station there would be very convenient. As a member of Sustainable Arlington, we surveyed the town a few years ago to determine public transportation usage. Not surprisingly, upwards of 90% of residents who lived closest to the Alewife station used public transportation, as compared to much less than half through the rest of Arlington where only the bus was nearby. When the subway is easily reached, it offers a fast, convenient and expedient solution for reducing ones carbon footprint. For these reasons, I'd love to see the green line extended to Route 16.

I-289-001 Construction, however, must pay close attention to its affects on the local watershed, and mitigate any damage. The construction of the Alewife T Station still wreaks havoc on Alewife Brook, Spy Pond and other water bodies in the Mystic River Watershed. We must learn from our mistakes there and ensure that our waterways are cared for so we can continue restoration of our lakes, ponds, rivers and brooks to a swimmable and fishable condition.

I-289-002 I-289-003 Parking, traffic and other factors will also need to be properly designed so as to mitigate stress on nearby neighborhoods. Safe pedestrian walkways and bike routes along with plenty of bike racks would help me and many others to be car-free and use this nearby public transportation.

Based on the recommendation of STEP, I'd also like to request the following:

I-289-004 + Design and construct the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project.

I-289-005 + Eliminate the Yard 8 Option for the Maintenance Facility and provide a full analysis of Scheme L and the alternate Scheme L designs.

I-289-006 + Commit to a collaborative public process for the next phase that would provide oversight and station area participation and develop a process for addressing mitigation concerns.

I-289-007 + Integrate and extend bike paths, sidewalks, pedestrian cross walks (or add elevated walkways) into the design, planning and funding of the Green Line extension.

Thank you for advocating for this extension to Route 16 as an integral part of the Green Line extension.

1

I-289-001

As described in DEIR/EA Section 5.9, the Project would be required to comply with federal and state stormwater discharge permit requirements during both the construction and operational phases. Compliance with these standards would include using Best Management Practices to prevent contamination of stormwater and control erosion and accretion (sedimentation) from stormwater runoff from the railroad alignment, stations, and maintenance facility.

I-289-002

DEIR/EA Chapter 6 and FEIR Chapter 8 list the traffic and parking measures to which MassDOT has committed to mitigate impacts. These mitigation measures address pedestrian and roadway traffic signal improvement needs, impacts during construction, and parking enforcement coordination. These measures will be further advanced during preliminary engineering.

I-289-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary

engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-289-004

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-289-005

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement

during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-289-006

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-289-007

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

HJ

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
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MEPA

Dear Secretary Bowles,

As a longtime resident of East Cambridge and as President of the East Cambridge Planning Team, I am writing to express my concerns and those I have heard over the years from neighbors about the planned move of the Lechmere T station across McGrath Highway..

I-290-001

Lechmere Square is a major gateway to East Cambridge and an integral hub of our neighborhood. According to reports from those studying area business potential, approximately one million people cross Cambridge Street from the present stop at Lechmere to shop at the Galleria Mall on First Street every year. That number alone, along with residents using public transportation is an inordinate amount of people to cross a major highway.

One of our principal concerns is safety. Crossing a major highway and a busy intersection can present problems for the development of the new station as well as for those using public transportation. We want to be sure that all crossings at Cambridge Street and Monsignor O'Brien Highway are well designed and offer the utmost protection.

I-290-002

Another concern is the design of the station. The preliminary design shown to residents at a recent meeting left much to be desired. Why are we being asked to purchase the Charlie Card while standing out in the elements? There appears to be no lobby in the present plans. Furthermore, the entrance is not convenient to anyone coming from the East Cambridge neighborhood or the Mall. There needs to be more than one entrance and easy access for the handicapped. We sincerely believe that the Green Line and bus station design need to be properly integrated with the future Northpoint street grid. This will further insure safety for those using the bus service and the T.

I-290-003

Last but not least, I would like to see the historic station buildings redeveloped around a new public market square. I firmly believe that this concept could be done with little or no expense to the T. The plan that I am enclosing will minimize the impact on local businesses and residents. A lively square/market area will make crossing two busy streets easier for those using public transportation and will add to the value of the area. Make Lechmere a destination not a transition point.

Thank you for your consideration.

Bette Skandalis
150 Cambridge St. #407
Cambridge MA 02141

I-290-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-290-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-290-003

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

BEVERLY SKY FIBER ART 1 FITCHBURG STREET #B552 SOMERVILLE MA 02143
WEBSITE: WWW.BEVERLYSKY.COM / EMAIL:BEVERLYSKY@AOL.COM / 617-776-8749

December 21, 2009
The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, suite 900
Boston, MA 02114

Re: Project # EEA # 13886

Dear Secretary Ian Bowles,

As a founding owner and artist of the Brickbottom Artists Buildings I have been living and working here for the past 23 years.
Twenty-five years ago, our community bought these abandoned buildings in an industrial area, bounded on two sides by railroad tracks and towing companies and a waste disposal site on the other side. We have worked hard to change this neighborhood into a vibrant artists community that has transformed this area into a destination for cultural enrichment in Somerville and the Boston area.
We appreciate the possible benefits to our neighborhood of increased access to transportation, as it would save us a twenty-minute walk from the Lechmere train stop. In cold, or stormy weather that twenty-minute walk each way can be brutal, especially for us seniors.
We have been actively involved with this issue since it's inception, have written countless letters, made phone calls, attended meetings, have retained legal counsel, and still it is shocking that Yard 8 is still being considered as a possible maintenance facility.

I-291-001 Has anyone from your organization come out to visit us in our studios and homes here? Have they stood in our homes with our babies and children and heard the existing trains rattle by day and night, or idle on the tracks for an hour or so in the middle of the night? Our building trembles when the trains roll by.
More trains, noise, vibration, and harmful air quality will significantly impact and diminish the already stressful environmental quality of life we have created here.

I-291-002 We are determined to oppose any additional harmful impact on the 220 residents in our community.
Please consider the alternative Mirror H, Option L and other alternate sites.

Cordially,
Beverly Sky

I-291-001

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. Additionally, the Project will improve local and regional air quality. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-291-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: naomi slagowski [naomislagowski@gmail.com]
Sent: Thursday, January 07, 2010 9:10 PM
To: Johnson, Holly S (ENV)
Subject: EEA #13886

Dear Ms. Johnson,

I would like to submit comments on the DEIR. The areas that need comment are:

Station Design & Siting

I-292-001 · Green Line stations must connect as seamlessly as possible with all other clean modes of transportation, including current and re- routed buses. Station design should accommodate bus drop off and pick- up (for example, using bus pull-out pockets or curb extensions) with maximum integration of transit modes and minimal street disruption. Optimized bus routes connecting to Green Line stations should be implemented simultaneously with the start of Green Line service, as was done for the Red Line northwest extension.

I-292-002 · Station designs should allow for car drop off, but not parking, and present ease of pedestrian and bicycle access by locating station headhouses on major streets whenever possible, with station access from both sides of the street and in all directions of travel. Sidewalks leading to headhouses should be widened and additional crosswalks considered near stations. This will maximize transit use.

I-292-003 o Mass DOT, working with community representatives should reconsider station designs to maximize ease of access particularly where riders will access stations at overpass bridges to maximize ease of access, efficiency and lower construction costs. Pedestrian and bus access to stations and high station visibility from major streets should be prioritized.

I-292-004 · Stations should provide adequate bicycle storage. This should be calculated based on a percentage of 3 to 5% of boardings at the stations. Bicycle storage should be sheltered from the elements, especially at Route 16, Lowell Street, and Union Square stations, to enable all-weather access.

· The Federal Transit Administration has issued a proposed change to bicycle/pedestrian access to public transportation recognizing the importance of maximizing multi-modal access. The proposed policy states:

For purposes of determining whether a pedestrian or bicycle improvement has a physical or functional relationship to public transportation, regardless of whether it is funded as a capital project or public transportation enhancement, all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation. According to a test of activity and use, pedestrian and bicycle improvements beyond these threshold distances may be eligible for FTA funding if the improvement is within the distance most people can be expected to safely and conveniently walk or bicycle to use that particular transit service. Federal Register: November 13, 2009 (Volume 74, Number 218), http://edocket.access.gpo.gov/2009/E9-27240.htm

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I-292-005 · The new Green Line stations should be designed with

1

I-292-001

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-292-002

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-292-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

I-292-005 elevators and should not include escalators, which are expensive to install and maintain. Wide staircases and ADA elevator access are sufficient. Reallocate the escalator budget for other station elements recommended in this letter.

I-292-006 · Constructi the new station platforms with ADA-compliant level boarding for low-floor Green Line cars that have sliding rather than accordion doors currently used on Green Line cars.

I-292-007 o System-wide accessibility should be the goal of the MBTA. To accomplish this the MBTA should replace accordion-style Green Line car doors with sliding doors that are compatible with level boarding. Raise all other station platforms in the Green Line system for level boarding, and order sliding doors in the new Type 9 rolling stock and retrofit all existing Green Line cars. This system-wide change would eliminate the need for time-consuming wheelchair ramps and mobile wheelchair lifts, while speeding up all passenger boarding.

I-292-008 · Station and station area designs must be developed through a formal and interactive community participation process to ensure that they fit into existing
I-292-009 neighborhoods and support appropriate future mixed use development. Takings should be minimized to save the state money and to preserve land uses.

I-292-010 · Design for the relocated Lechmere Station should pay particular attention to the East Cambridge Planning Team's pedestrian- friendly area design ideas and old Lechmere Station re-use suggestions. The terminus at Route 16 should incorporate MGNA's ideas for minimizing takings.

I-292-011 · Station design and siting should involve active participation of knowledgeable transportation accessibility advocates to ensure accessibility requirements are adequately addressed.

Community Path Integration & Preservation of Corridor Transit Potential

I-292-012 · Track design and construction should enable adding future stations - between Lechmere and Washington Street / Union Square, between College Avenue and Route 16, and along a future Green Line extension to Porter Square that could serve both Cambridge and Somerville neighborhoods.

I-292-013 · The Community Path and its important station connections must be designed and constructed simultaneously with the Green Line extension in order to facilitate direct pedestrian and bicycle access to the stations and to ensure a safe, attractive, and highly- functional Community Path.

Economic Development & Regional Corridor Planning

I-292-014 · Track, station and Green Line corridor area designs must provide full roadway and community access to Brickbottom Inner Belt and Lechmere Station through reconstruction of Route 28 as a neighborhood and local business friendly surface boulevard that serves pedestrians and bicyclists as well as cars. Improved connectivity between both sides of Route 28 is crucial for economic development, pedestrian station access, and improved quality of life.

I-292-015 · State and other leading Transit-Oriented Development guidelines should be utilized to promote strategic regional economic development within a mixed use context in the Brickbottom Inner Belt and Union Square Boynton Yard districts. Maintaining diversity in people and businesses while improving the natural environment is critical. Access to open space and greenery promotes health.

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In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-292-004

The amount of bicycle storage at each station is based on ridership projections developed by CTPS. DEIR/EA Appendix D includes the methods CTPS used to analyze demand for bicycle parking. Detailed bicycle parking designs will be further developed during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-292-005

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-292-006

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities

I-292-016 · The design and siting of the maintenance facility should not prevent development of a street grid in Inner Belt/Brick Bottom that enables access from North Point, McGrath-O'Brian Highway and Washington St.

I-292-017 Maintenance Facility & Regional Environmental Justice
· More detailed analysis of Mirror H, Option L and Option L alternative is necessary. The siting of the maintenance facility and storage yards should not increase the transportation infrastructure and environmental burdens in Somerville or interfere with proposed economic development in the Brickbottom Inner Belt area.

I-292-018 · Current use of the Boston Engine Terminal for the maintenance of diesel engines serving the commuter rail network south of Boston needs to be phased out and a new facility built south of Boston to eliminate the unsustainable and unjustifiable shuttling of trains through Cambridge.

I-292-019 Public Participation
· A project-wide Citizens Advisory Group should be maintained throughout detailed design, engineering, construction and start-up phases with smaller local advisory groups established to work with the MBTA and consultants to address specific station design, land use, connectivity, and construction and mitigation issues.

· A procedure for determining remedies and/or compensation, incorporating community representation, should be required to handle instances when project mitigation proves insufficient to meet pre- agreed impact standards for noise, vibration, pollution and other environmental burdens.

I-292-020 · MEPA should require collaborative planning, with community involvement and public coordination that should intensify immediately, before this project progresses and require that senior project staff work our of a centrally located field office to maximize access.

Public Comment Process
Public comments on the DEIR/EA should be made to the Secretary of Energy and Environmental Affairs, through the Commonwealth's MEPA process. The federal government conducts its own review of the document to ensure adequacy of the document under the federal National Environmental Policy Act (NEPA) process, and accepts public comment to the NEPA process in two ways:

First, the comments made at the November 18 Public Hearing will be included in a transcript that will be submitted to the Federal Transit Administration (FTA).

Second, EOT will compile the comment letters submitted through the MEPA process, along with responses to these comments, and provide them to the Federal Transit Administration after the completion of the DEIR comment period.

There has been considerable discussion about whether to accept the DEIR as a Final Environmental Impact Report (FEIR) or to require that it be treated as a DEIR and demand that changes be made in a subsequent FEIR.

To avoid the significant delay that a separate FEIR would entail, the most critical issues with the DEIR could either be addressed in a Supplemental EIR, or in Addenda to the FEIR. These issues include:

I-292-021 § Eliminate the Yard 8 Option for the Maintenance Facility and

3

Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-292-007

The Green Line Extension Project is being designed for fully accessible stations in compliance with ADA requirements. However, the issue of systemwide level boarding on the Green Line and modifications to existing vehicles is beyond the scope of this Project.

I-292-008

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-292-009

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-292-010

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. In accordance with the Secretary's Certificate on the DEIR/EA, the FEIR (Chapter 5, Lechmere Station) includes only conceptual station designs. Plans for stations, the

I-292-021 require a full analysis of Scheme L and the alternate Scheme L designs.

I-292-022 § Commit to a collaborative public process for the next phase that would provide oversight and station area participation and develop a process for addressing mitigation concerns.

I-292-023 § Integrate the Community Path into the design, planning and funding of the Green Line extension.

I-292-024 § Coordinate the Green Line extension with calming of the McGrath/O'Brien Highway in Cambridge & Somerville.

I-292-025 § Designing and constructing the Mystic Valley Parkway / Route 16 terminus at the same time as the rest of the project.

Thank you,
Naomi Slagowski
Somerville

storage and maintenance facility, and all project elements will be refined during the preliminary engineering stage of the Project. MassDOT intends to demolish the existing Lechmere Station and prepare the site for future redevelopment. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during project design.

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-292-011

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Designs for each station will be further developed during the Project's preliminary engineering stage. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. Specific design details and station elements will be further developed during preliminary engineering. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access. The process for stakeholder coordination during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-292-012

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-292-013

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-292-014

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-292-015

Direct and indirect impacts to land use are described in DEIR Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for smart growth land use, which would reduce automobile traffic congestion and improve air quality.

I-292-016

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-292-017

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-292-018

The Boston Engine Terminal (BET) and major modifications to its operations are beyond the scope of the Green Line Extension Project. MassDOT will continue to coordinate with the MBTA to explore

possibilities for shared facilities between the Green Line Extension storage and maintenance facility and the BET.

I-292-019

MassDOT and the MBTA conducted a series of public workshops to gather input on land use and facility design issues from the communities. The workshops were organized around facility locations or groups of locations. All were well-advertised, open to the public and in accessible venues.

I-292-020

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-292-021

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-292-022

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-292-023

MassDOT has committed to complete the final design of the proposed

Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-292-024

DEIR/EA Section 3.9 describes the compatibility of the Green Line Extension with other regional projects, such as the conceptual reconstruction of McGrath Highway and the Urban Ring transit corridor initiative. MassDOT has and will continue to coordinate with state and local agencies at appropriate milestones as the Project progresses to ensure, to the extent feasible, consistency with planning and other projects.

I-292-025

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Jill Slosburg-Ackerman
1 Fitchburg Street, C415
Somerville, MA 02143
617-625-4056
jsackerman44@comcast.net



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attention" Holly Johnson, MEPA Analyst
#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am an artist, one of the founders of the Brickbottom Artists' Building, and have been an owner of one of the studios here. While I appreciate all of your efforts on behalf of the community to improve public transportation in this area, I have deep concern regarding the proposal to create a maintenance facility in "Yard 8".

When my fellow artists and I developed this now vibrant artists' community in 1988, the area where this former A & P building is located was indeed an industrial wasteland. Since that time, I have seen huge changes---the parts of Cambridge and Somerville that abut this property have become essential commercial enterprises that serve residents and workers in the area. There are gardens and green spaces here. The city of Somerville has sponsored arts festivals under the McGrath Highway overpass and in Union Square. We have worked to enrich the land in the Brickbottom environs; our open studios events have contributed to the cultural life of this community. What we dared to hope for in establishing viable live-work space for artists is now a reality.

I-293-001

The proposal for siting of Yard 8 has ignored required land use studies and serious consultation with its Citizen's Advisory Group. It will deprive the city of Somerville the possibility for future development and revenue, create noise, vibrations, and poor air and light for its abutters, and drastically change the character of a rich urban community.

I hope that you and your colleagues will seriously reconsider your proposal, keeping in mind the need for including community involvement in this important plan in order to preserve good health, feasible solutions for abutters to a maintenance yard, and respect for the aesthetic and environmental impact of any proposed transportation project. So many of us have worked hard to create a beautiful neighborhood. Placing a maintenance facility and storage yard next to Brickbottom would be ruinous.

Again, thank you for your commitment to public transportation and your willingness to read this letter.

Sincerely,

I-293-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: irilyth@swarpa.net on behalf of Josh Smift [irilyth@infersys.com]
Sent: Friday, January 08, 2010 12:01 PM
To: Johnson, Holly S (ENV); Fichter, Katherine (DOT)
Subject: Comment on the DEIR for the Green Line Extension

Greetings! I'm a homeowner on Irvington Rd in Somerville, very near Rt 16 and Boston Ave, and I wanted to write in with a comment about the DEIR for the Green Line Extension, EEA #13886.

I-294-001

I'm disappointed that the report recommends terminating the line at College Ave, even temporarily (which often has a danger of becoming "permanently"). Terminating the line at College Ave would not serve my neighborhood, and seems likely to burden my neighborhood with increased traffic congestion, pollution, and additional years of construction impact. The report makes it clear that extending the line to Rt 16 is the preferred option, and I strongly believe that option should not be compromised.

I-294-002

I urge you to please reject the recommendations in this version of the DEIR to terminate the line at College Ave; and to instead require MassDOT to build the full Green Line Extension to Route 16 by December 2014.

Thank you for your time.

-Josh (irilyth@infersys.com)

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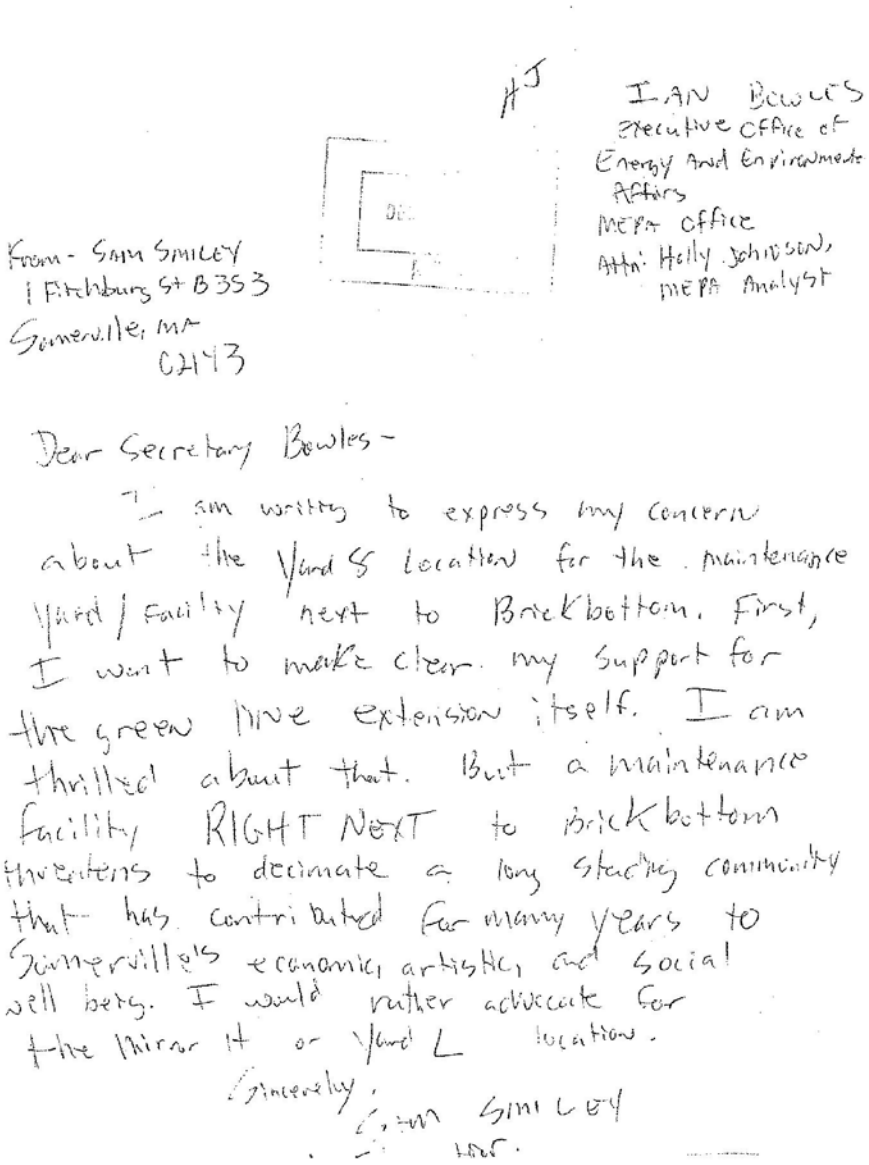
I-294-001

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-294-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



#J

IAN Bowles
Executive Office of
Energy and Environmental
Affairs
MEPA office
Attn: Holly Johnson,
MEPA Analyst

From - Sam Smiley
1 Fitchburg St B353
Somerville, MA
02143

Dear Secretary Bowles -

I am writing to express my concern about the Yard 8 location for the maintenance yard / facility next to Brickbottom. First, I want to make clear my support for the green line extension itself. I am thrilled about that. But a maintenance facility RIGHT NEXT to Brickbottom threatens to decimate a long standing community that has contributed for many years to Somerville's economic, artistic, and social well being. I would rather advocate for the Mirror It or Yard L location.

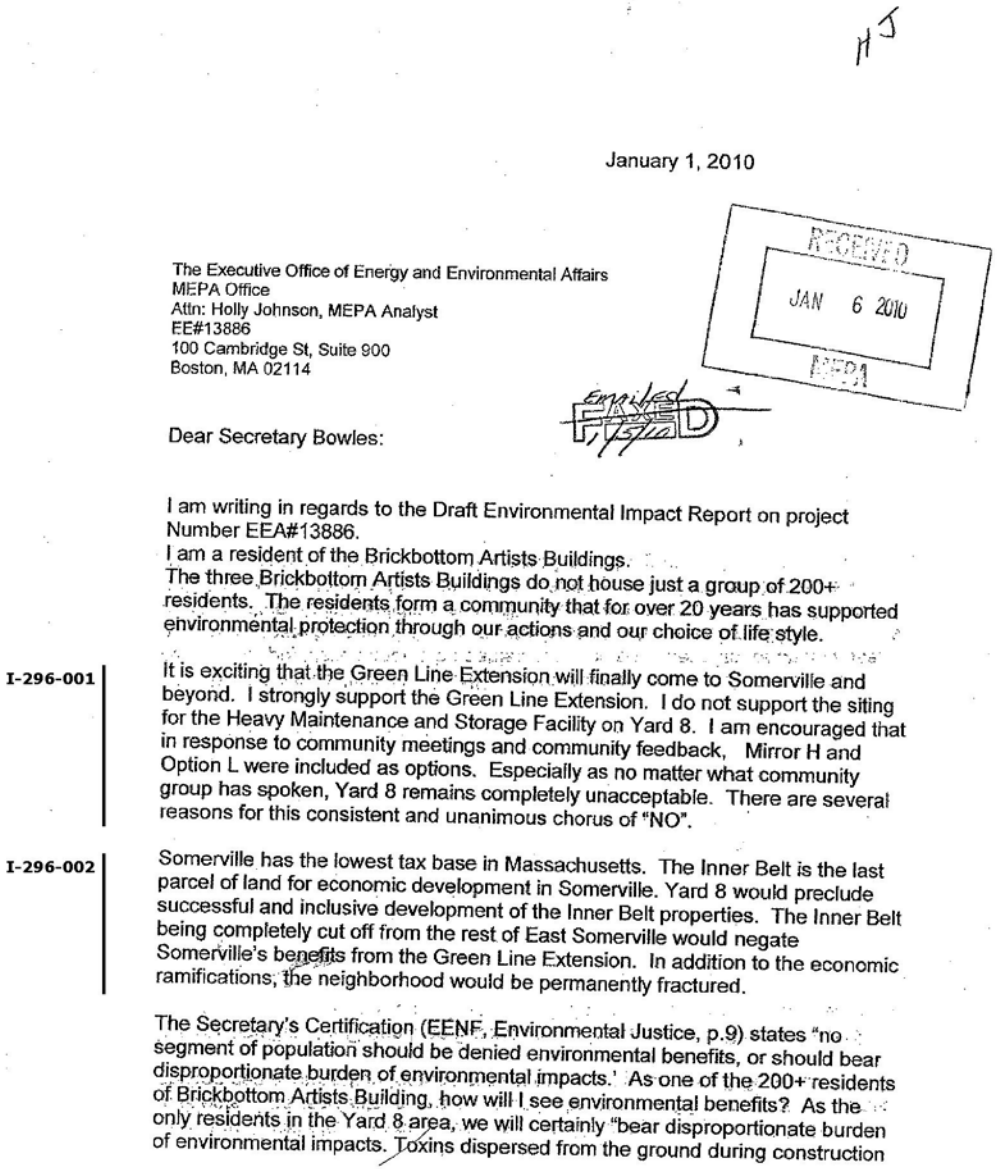
Sincerely,

Sam Smiley

I-295-001

I-295-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



January 1, 2010

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The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing in regards to the Draft Environmental Impact Report on project Number EEA#13886.
I am a resident of the Brickbottom Artists Buildings.
The three Brickbottom Artists Buildings do not house just a group of 200+ residents. The residents form a community that for over 20 years has supported environmental protection through our actions and our choice of life style.

I-296-001

It is exciting that the Green Line Extension will finally come to Somerville and beyond. I strongly support the Green Line Extension. I do not support the siting for the Heavy Maintenance and Storage Facility on Yard 8. I am encouraged that in response to community meetings and community feedback, Mirror H and Option L were included as options. Especially as no matter what community group has spoken, Yard 8 remains completely unacceptable. There are several reasons for this consistent and unanimous chorus of "NO".

I-296-002

Somerville has the lowest tax base in Massachusetts. The Inner Belt is the last parcel of land for economic development in Somerville. Yard 8 would preclude successful and inclusive development of the Inner Belt properties. The Inner Belt being completely cut off from the rest of East Somerville would negate Somerville's benefits from the Green Line Extension. In addition to the economic ramifications, the neighborhood would be permanently fractured.

The Secretary's Certification (EENF, Environmental Justice, p.9) states "no segment of population should be denied environmental benefits, or should bear disproportionate burden of environmental impacts.' As one of the 200+ residents of Brickbottom Artists Building, how will I see environmental benefits? As the only residents in the Yard 8 area, we will certainly "bear disproportionate burden of environmental impacts. Toxins dispersed from the ground during construction

I-296-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-296-002

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

will compromise my health, which I have so carefully tended to over 60 years. In addition, noise, light, and vibration 24 hours a day, 7 days a week, 50 feet from my building, would force me to stay inside with my windows closed. In order to sit in our beautiful garden, which the residents planted and maintain, I would need earplugs and an environmental mask.

The value of my property will decrease substantially. I knowingly chose to live in a "mixed-use" area. I knew and accepted the current trains and accompanying noise. I personally maintain one of the gardens along the Commuter Rail tracks. No amount of beautification, Love, and care will mitigate the disastrous impact of a Yard 8 siting of the Maintenance Facility on my home. Property values will be driven down and not only will I suffer financially but also my children as will.

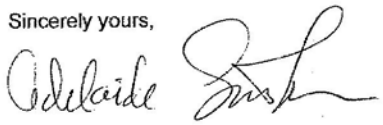
In closing, a couple of questions.

I-296-003 Will you have a Citizen Advisory Committee?
Will you not only listen to feedback but also continue to study Mirror H and Option L to assess the appropriateness of either? As you must be aware, Mirror H is the City of Somerville's choice.

I-296-004 Will you, after considering all the problems in the DEIR, stop the project from going to a Final ETR in regards to the Maintenance Facility? Clearly, there is a vital need for much more research and consideration before a final decision is made on this project.

Thank you for your time and your interest,

Sincerely yours,



Adelaide Smith
1 Fitchburg St C220
Somerville, MA 02143

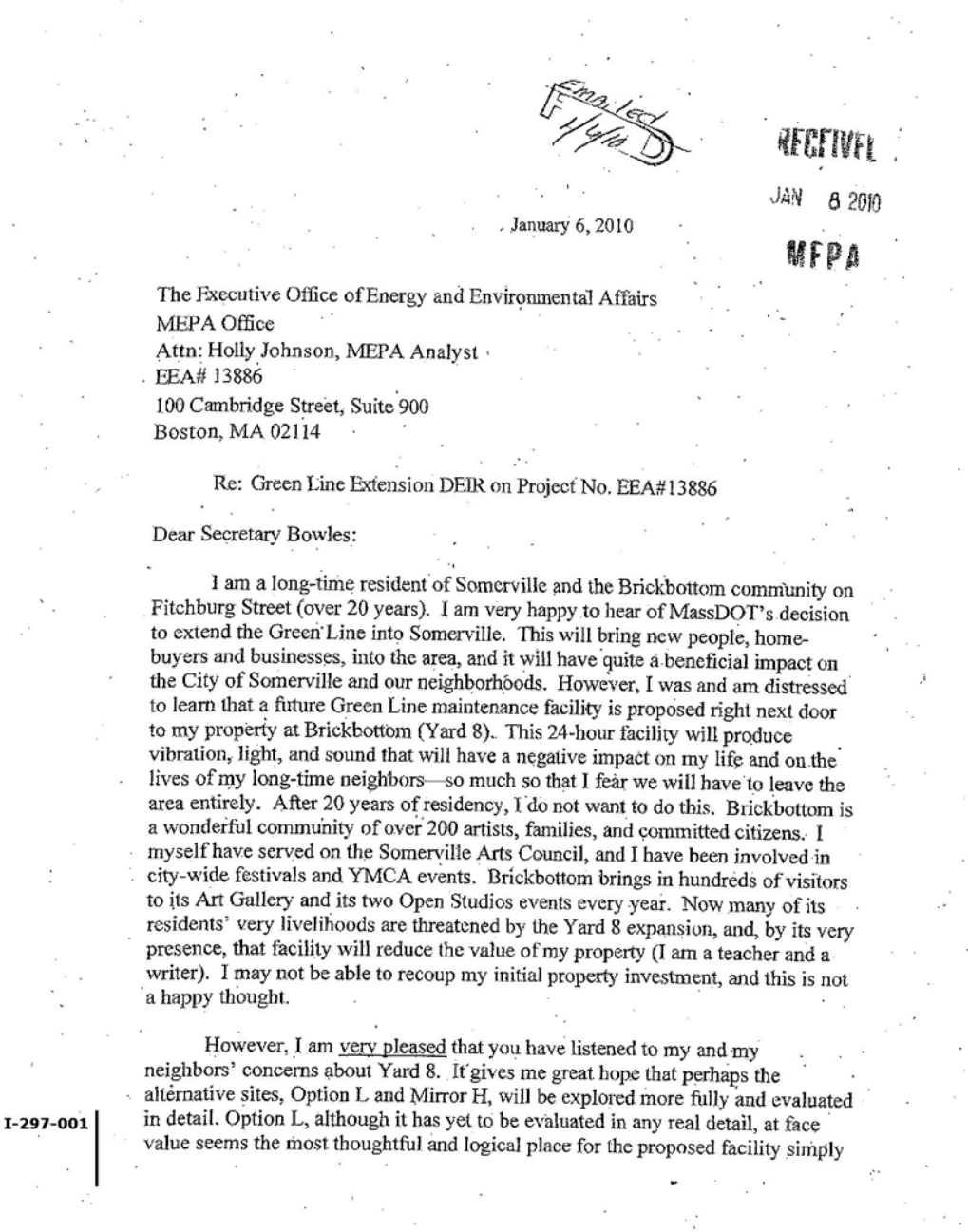
tennisadie@comcast.net

I-296-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-296-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.



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January 6, 2010

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA# 13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Green Line Extension DEIR on Project No. EEA#13886

Dear Secretary Bowles:

I am a long-time resident of Somerville and the Brickbottom community on Fitchburg Street (over 20 years). I am very happy to hear of MassDOT's decision to extend the Green Line into Somerville. This will bring new people, home-buyers and businesses, into the area, and it will have quite a beneficial impact on the City of Somerville and our neighborhoods. However, I was and am distressed to learn that a future Green Line maintenance facility is proposed right next door to my property at Brickbottom (Yard 8). This 24-hour facility will produce vibration, light, and sound that will have a negative impact on my life and on the lives of my long-time neighbors—so much so that I fear we will have to leave the area entirely. After 20 years of residency, I do not want to do this. Brickbottom is a wonderful community of over 200 artists, families, and committed citizens. I myself have served on the Somerville Arts Council, and I have been involved in city-wide festivals and YMCA events. Brickbottom brings in hundreds of visitors to its Art Gallery and its two Open Studios events every year. Now many of its residents' very livelihoods are threatened by the Yard 8 expansion, and, by its very presence, that facility will reduce the value of my property (I am a teacher and a writer). I may not be able to recoup my initial property investment, and this is not a happy thought.

However, I am very pleased that you have listened to my and my neighbors' concerns about Yard 8. It gives me great hope that perhaps the alternative sites, Option L and Mirror H, will be explored more fully and evaluated in detail. Option L, although it has yet to be evaluated in any real detail, at face value seems the most thoughtful and logical place for the proposed facility simply

I-297-001

I-297-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-297-001

because it would have no obvious negative impact on any present resident of Somerville. Thank you very much for being open to this possibility.

I-297-002

In any case and at the very least, I hope that you will, in your exploration of these alternative facility sites, also consider a detailed cost analysis of noise and vibration mitigation costs for both the construction and permanent phases of the project. Although I do not want to consider the possibility that you will choose to continue with the Yard 8 expansion (I am heartily against it for personal and professional reasons), I do want to do everything possible to mitigate the negative effects of this proposed facility upon my life. The DEIR report currently does not fully allow for noise barriers or containment in relation to the storage yard, and only 40 out of our 155 residences are designated for soundproofing. I hope that you will study the mitigation requirements more fully and consider the permanent impacts by supporting a complete cost analysis with deadlines for fulfillment. Please minimize the impact of this facility and the storage yard on people.

I ask you to think, also, of the potential revenue growth of the Brickbottom area. Not only will the proposed Yard 8 site for the maintenance facility and storage yard produce noise, light, and vibration abhorrent to anyone living around it, but it will build a barrier between Brickbottom and the Inner Belt so that any future businesses and residential development in this area will be stopped cold. There will be no future tax revenues for the City of Somerville, and any adjacent future growth potential (and growing property values) will be irrelevant.

Again, I am very much in favor of the Green Line Extension, but I do feel that the proposed Yard 8 site for its Maintenance Facility and storage yard is not the most beneficial for the City of Somerville and certainly not for the residents (me) of Brickbottom. I so much appreciate your continued consideration of alternatives to Yard 8 and your continued awareness of the impact of any facility such as you suggest on surrounding neighborhoods.

Thanks very much.

Sincerely,

Kate Snodgrass

Kate Snodgrass
1 Fitchburg Street, C-508
Somerville, MA 02143
617-623-0516

I-297-002

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-298-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-298-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Signature

Sotiris Stefanopoulos
Print Name

VA Monsignor Obrien Hwy Cambridge MA unit 408
Address

Johnson, Holly (EEA)

From: Steiner, Barbara A. [BSTEINER@PARTNERS.ORG]
Sent: Friday, January 08, 2010 2:14 PM
To: Johnson, Holly S (ENV); Johnson, Holly S (ENV)
Subject: FW: Somerville resident comments: Green Line Extension Draft EIR (EEA #13886)

January 8, 2010
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston , MA 02114
Reference: Green Line Extension Draft EIR (EEA #13886)
Dear Secretary Bowles:
This letter is in reference to the proposed Green Line development into Somerville and Medford.
First: I want to thank you for asking for community input on this project, and for taking the time to read my comments and the comments of my fellow residents. I want to assure you that I strongly support the Green Line extension to Somerville and Medford, as well as the extension of the Somerville Community Path to Lechmere.

I feel, however, that important changes to the proposal are needed to ensure the projects are done in the best way for all concerned.

I-299-001
- First, and perhaps most forcefully, I feel that the Yard 8 option for the T Maintenance facility should be permanently shelved. Placing the maintenance facility at Yard 8 will prevent much-needed economic development of this area, depriving Somerville of the possibility of desperately-needed urban commercial infrastructure in the area. It will also permanently prevent the Inner Belt's integration into the rest of the region. Instead, I strongly urge that there be a full analysis of the other locations: Mirror H option, Option L and the alternate Option L-BET. The placement of this facility is one of the most important issues in this project, and Somerville's and the area's economic, environmental and residential must be front and center when this decision is made.

I-299-002
- Please ensure that the MassDOT clearly states that the Community Path extension will be designed by MassDOT's contractors, as agreed to in a February 24, 2009 letter from the former EOT.
- The Green Line and Community Path extensions should be constructed as one project and must clearly be described as such by MassDOT. This is critical to ensure both projects' cost-efficiency and technical feasibility.

I-299-003
- Please ensure that MassDOT works with Somerville and other state and federal agencies to obtain the necessary funding to build the Community Path extension as part of the Green Line extensions, including applying for federal funding. Note that this was done with the Linear Park as part of the Red Line and the Southwest Corridor path as part of the Orange Line. Please ensure that funding for this project is consistent with the way these others were done!

I-299-004
- Please be sure to design and construct the Mystic Valley Parkway/Route 16 terminus at the same time as the rest of the project. It makes no sense to stop at College Ave. and plan on continuing the T to Rte. 16 in some future "Phase 2." It will only cost more money in the long run. More seriously, it runs the risk that the T Rte. 16 extension won't happen at all.

I-299-005
- Please design and construct the Union Square station so that it can be extended to Porter Sq. in the future, despite the lack of plans and funding for an extension right now. As all developers know, it makes sense to build the right infrastructure for future expansion so that when the will is there, the way will be too.

Again, I thank you very much for taking the time to read these and other comments. The extension of the Green Line and Community Path will give a tremendous boost to our communities' efforts to increase public transportation accessibility, reduce traffic congestion and air pollution, create jobs, enable the development of revenue- and quality-of-life-enhancing infrastructure, and make our communities healthier places to live. I eagerly await the next phase of the project!

Yours truly,
Barbara Steiner, EdM

I-299-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-299-002

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-299-003

Please see response to Comment I-299-002.

29 Quincy St., #2
Somerville, MA 02143
bsteiner@partners.org

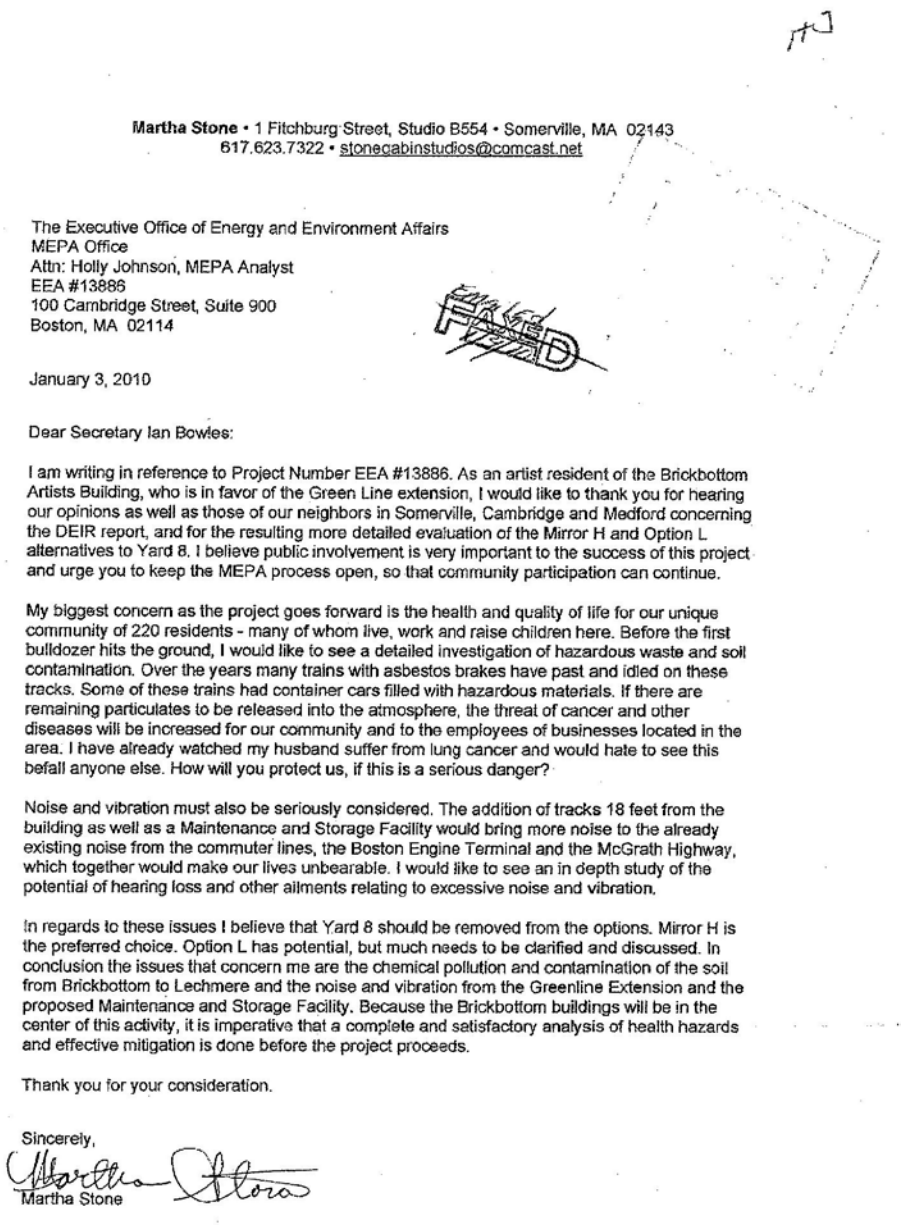
The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at http://www.partners.org/complianceline . If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

I-299-004

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-299-005

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.



Martha Stone • 1 Fitchburg Street, Studio B554 • Somerville, MA 02143
617.623.7322 • stonecabinstudios@comcast.net

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

January 3, 2010

Dear Secretary Ian Bowles:

I am writing in reference to Project Number EEA #13886. As an artist resident of the Brickbottom Artists Building, who is in favor of the Green Line extension, I would like to thank you for hearing our opinions as well as those of our neighbors in Somerville, Cambridge and Medford concerning the DEIR report, and for the resulting more detailed evaluation of the Mirror H and Option L alternatives to Yard 8. I believe public involvement is very important to the success of this project and urge you to keep the MEPA process open, so that community participation can continue.

I-300-001

My biggest concern as the project goes forward is the health and quality of life for our unique community of 220 residents - many of whom live, work and raise children here. Before the first bulldozer hits the ground, I would like to see a detailed investigation of hazardous waste and soil contamination. Over the years many trains with asbestos brakes have past and idled on these tracks. Some of these trains had container cars filled with hazardous materials. If there are remaining particulates to be released into the atmosphere, the threat of cancer and other diseases will be increased for our community and to the employees of businesses located in the area. I have already watched my husband suffer from lung cancer and would hate to see this befall anyone else. How will you protect us, if this is a serious danger?

I-300-002

Noise and vibration must also be seriously considered. The addition of tracks 18 feet from the building as well as a Maintenance and Storage Facility would bring more noise to the already existing noise from the commuter lines, the Boston Engine Terminal and the McGrath Highway, which together would make our lives unbearable. I would like to see an in depth study of the potential of hearing loss and other ailments relating to excessive noise and vibration.

I-300-003

In regards to these issues I believe that Yard 8 should be removed from the options. Mirror H is the preferred choice. Option L has potential, but much needs to be clarified and discussed. In conclusion the issues that concern me are the chemical pollution and contamination of the soil from Brickbottom to Lechmere and the noise and vibration from the Greenline Extension and the proposed Maintenance and Storage Facility. Because the Brickbottom buildings will be in the center of this activity, it is imperative that a complete and satisfactory analysis of health hazards and effective mitigation is done before the project proceeds.

Thank you for your consideration.

Sincerely,

Martha Stone

I-300-001

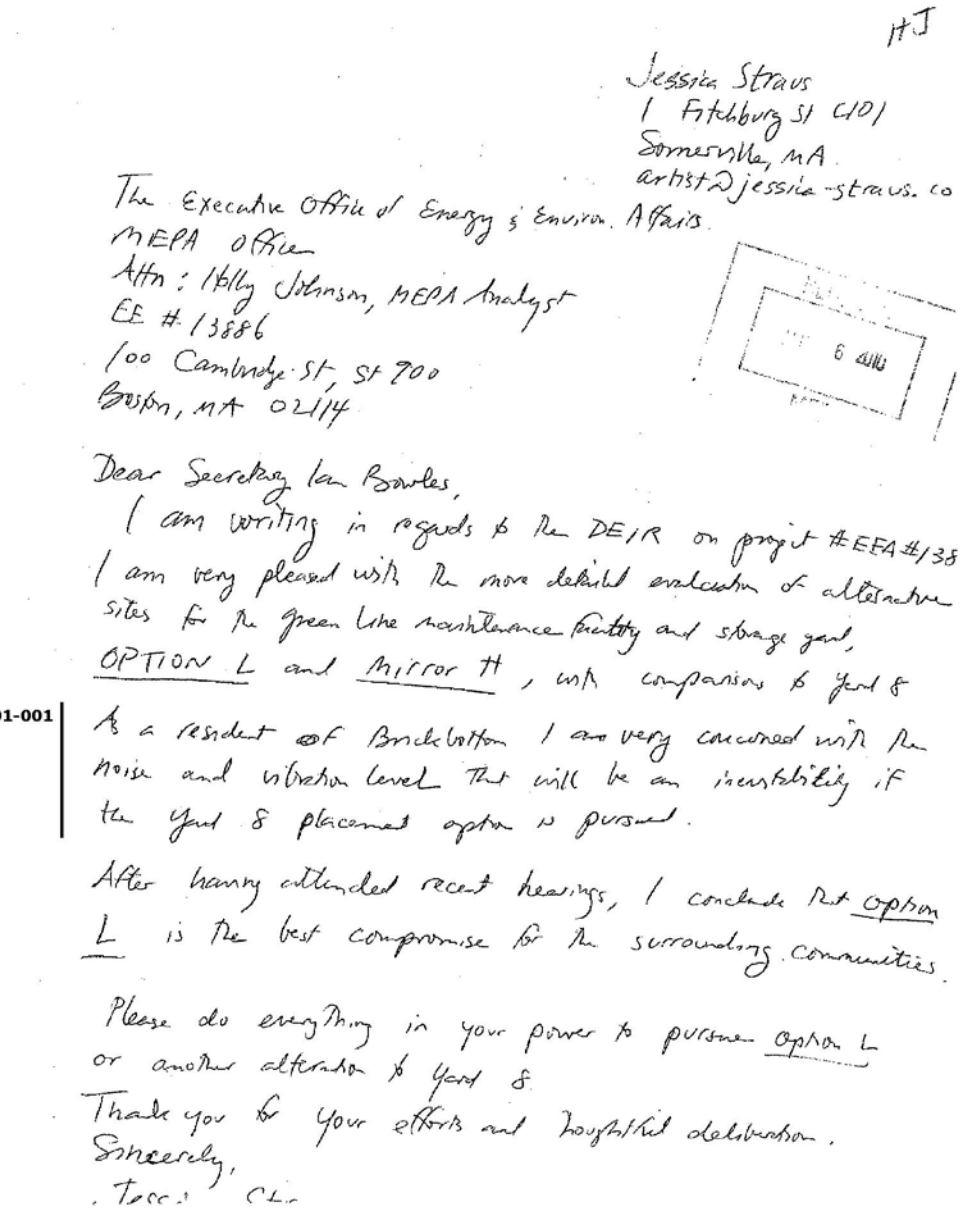
An analysis of hazardous materials potentially present within the Green Line Extension Study Area is provided in DEIR/EA Section 5.14, Hazardous Materials. Additional investigation may be conducted during the next phases of the Project to determine the nature and extent of any contamination and remediate any sites as appropriate. This work would be conducted in accordance with the Commonwealth's Massachusetts Contingency Plan requirements.

I-300-002

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-300-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.



HJ

Jessica Straus
1 Fitchburg St C101
Somerville, MA
artist@jessica-straus.com

The Executive Office of Energy & Environ. Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE #13886
100 Cambridge St, St 700
Boston, MA 02114

Dear Secretary Ian Bowles,

I am writing in regards to the DEIR on project #EEA #138
I am very pleased with the more detailed evaluation of alternative sites for the green line maintenance facility and storage yard, OPTION L and Mirror H, with comparisons of yard &

I-301-001

As a resident of Brickbottom I am very concerned with the noise and vibration level that will be an inevitability if the yard & placement option is pursued.

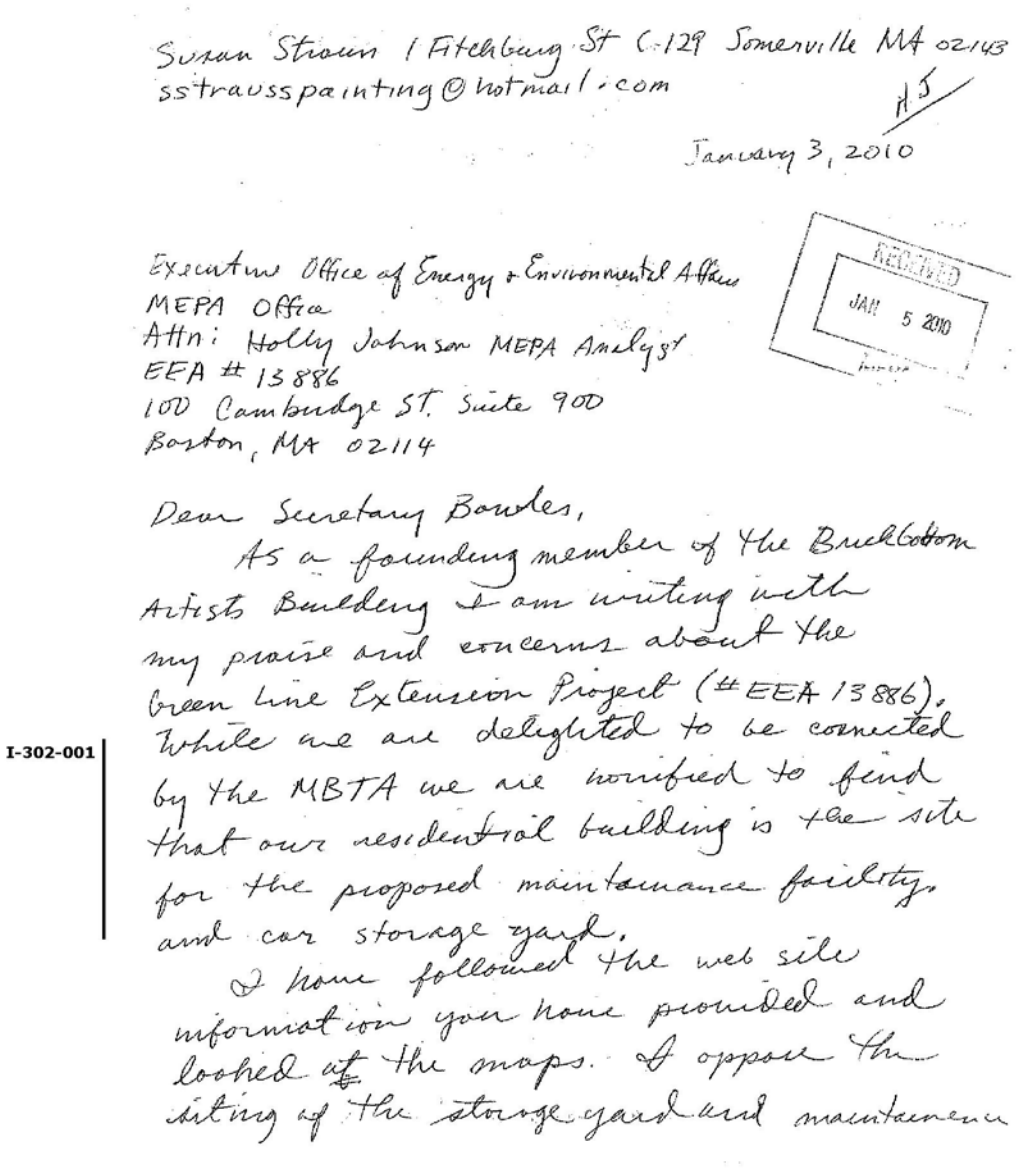
After having attended recent hearings, I conclude that Option L is the best compromise for the surrounding communities.

Please do everything in your power to pursue Option L or another alternative of Yard &
Thank you for your efforts and thoughtful deliberation.
Sincerely,
Jessica Straus

I-301-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.



Susan Strauss 1 Fitchburg St C-129 Somerville MA 02143
sstraussspainting@hotmail.com

#5

January 3, 2010

RECEIVED
JAN 5 2010

Executive Office of Energy + Environmental Affairs
MEPA Office
Attn: Holly Johnson MEPA Analyst
EEA # 13886
100 Cambridge ST. Suite 900
Boston, MA 02114

Dear Secretary Bowles,

As a founding member of the Brickbottom Artists Building I am writing with my praise and concerns about the Green Line Extension Project (#EEA 13886). While we are delighted to be connected by the MBTA we are horrified to find that our residential building is the site for the proposed maintenance facility and car storage yard.

I have followed the web site information you have provided and looked at the maps. I oppose the siting of the storage yard and maintenance

I-302-001

I-302-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

facility at yard 8. It is too close to people living in Somerville and divides our community, building a barrier between Brickbottom and the Inner belt, impacting potential future development. The noise and vibration issues from this 24 hr. facility and the storage yard (which according to the DEIR report doesn't have noise or containment provisions!) is not acceptable.

The fairest of the options - Minor H would have Cambridge and Somerville sharing the yard and storage area. At sites these structures furthest from residential dwellings. Option L, the alternate option would also work if the parking was reconfigured so that the storage lot could be set further away from Brickbottom. However, this probably will not solve the noise of track switching that will be continuous when cars are stored.

I-302-002

The comment is referring to the double crossover located between Sycamore Street and Central Street. This crossover cannot be on a curve and there are curves to the north and south. This crossover will be used by Green Line vehicles in the rare instances a vehicle is disabled and other vehicles need to pass. There will be no emergency drills or practicing, late night or otherwise, that will involve the double crossover. A noise barrier is proposed on both sides of the ROW to mitigate any track noise in this area.

I-302-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-302-004

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement

I also want to speak out about the emergency reverse track cross over that the Green Line proposes between Sycamore and Central Streets. I have the privilege of living on Willoughby St abutting the tracks as well as having a studio at Brick Bottom. The proposed cross-over is literaly in my back yard and I imagine that there will be emergency drills at night when the track is not in use. Can there be an alternative site for this switch and if not - will there be noise mitigation and reasonable rules about practice?

I-302-002

I am asking that the Green Line project continue to meet with the Community and take into account our feed back. The process should

I-302-003

I-302-004

during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-302-004

include a supplemental EIR for the maintenance facility. As I understand it, the project can meet its deadlines separate from the maintenance facility which has grown from the light maintenance originally proposed.

Thank you for giving me an opportunity to comment,

Susan I Strauss

SUSAN STRAUSS

617 666 - 1989

Johnson, Holly (EEA)

From: Susan Strauss [sstrausspainting@hotmail.com]
Sent: Thursday, January 07, 2010 4:52 PM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Draft EIR (EEA#13888)

Dear Secretary Bowles,

I am looking forward to the Green Line Extension. I want to thank you again (I wrote you a letter as well) and add a postscript e-mail with some further comments concerning the Green Line Extension Draft EIR. (EEA #13886).

I have received an e-mail from the Community Path; bike path folks and I have to say, I agree with them that the design of
the stations and the bike path should be linked. They have lots of practical ideas. After all, the point of the extension is to improve the transportation system, the urban/suburban environment and increase train ridership. If you include funding for the bike path as part of the Green Line Extension Project, the input from bike riders will assist the improvement of the
transportation system around actual rider's needs and experiences, the environment wins and you will get a more functional system and more riders!

I-303-001

In an e-mail from Kate Fitcher for the Green Line, I was told that the designs for the path and Green Line were separate. Therefore, there is no clear way for me to see what my back yard will look like for all the future years I live there! I thought, well that's just the way it is. Now I realize that this is not a good way to to get this project done! I am asking that the final EIR not go forward without further design and that community input continue to shape the design process. I am also asking that the MassDOT obtain funding for the Community Path and that their contractors design the bike path in conjunction with the Green Line Extension as previously agreed to in a letter dated 2-24-09 from former DOT. I believe that joining the two projects, as was done for both the Red and Orange Lines will save money. Finally, homeowners along the path will have improved quality of living instead of resenting unfulfilled promises.

Sincerely,
Susan Strauss
20 Willoughby St.
Somerville, MA 02143

Your E-mail and More On-the-Go. Get Windows Live Hotmail Free.
http://clk.atdmt.com/GBL/go/196390709/direct/01/

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I-303-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

The Executive office of Energy and Environmental Affairs
MEPA Office
100 Cambridge St., Suite 900
Boston, MA 02114

December 21, 2009
Dear Secretary Ian Bowles,

I wanted to thank you for the immense amount of work and effort that has gone into the Green Line Extension Project to date. As a long time Somerville resident and a lifelong non-driver, I am pleased to see that real usable public transportation is being seriously considered for East Somerville.

I-304-001 However, as a resident of the East Somerville area, I am seriously concerned about the proposal to place the maintenance facility within 18 yards of Brickbottom, a vibrant community of artists, professors, families, children, health professionals, scientists, and others. We at Brickbottom, hope to be part of a burgeoning community, to realize real community expansion and growth that invites our neighbors from every direction and I envision plenty of pedestrian activity with small businesses such as book stores, coffee shops, and restaurants like many of our neighbors' squares - I do not picture a location for a large maintenance facility that will truncate us from the rest of the city.

I-304-002 And as you can imagine, the proposed location of the 24 hour maintenance facility at Yard 8 will greatly impact our community by adding unwanted noise, pollution, light, and traffic both foot and car during working hours (24 hours!) and even more injuriously, we will be impacted during the building of this facility that we do not want here, especially as we do not have a comprehensive mitigation proposal that is acceptable to the community – only forty windows out of 155 units to get soundproofing is not enough. The current proposal clearly does not fully address the full impact of noise, vibration, dust, pollution, or light that residents will have to tolerate daily and endlessly hereforth should the project be accepted.

Furthermore, this proposal serves to add insult to injury to this diverse community that already is burdened by multiple inequities including noise and pollution from railroad tracks on two sides, highway on one side, a trash facility, and multiple large vehicle sites. While this may seem to be the perfect place to add more unwanted facilities because of just this, I am asking that you curb the inequities this community already tolerates because enough is enough. It is somewhat daunting to think that a committee feels that a site located right next to a community of over 200 residents including children and seniors would be ideal for a large train maintenance facility. It is further appalling to think that the committee wants to place a facility right next to the only residential community in the area when there seemingly appears to be so much around this very area that does not
I-304-003 abut a residential building. I applaud the search for alternative locations and strongly encourage continued study of Mirror H, Option L, and other alternative sites in consideration for our quality of life and for the quality of Somerville's communities.

Thank you for your continued consideration to our concerns.

Sincerely yours,

Pamela Su
1 Fitchburg St. C13
Somerville MA 02143

I-304-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-304-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-304-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the

evaluation, Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Anita Suhanin [anitasu@anitasuhanin.com]
Sent: Friday, January 08, 2010 9:56 AM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension

I-305-001

Dear Ms. Johnson,
I support the Green Line Extension to Route 16.
We recently purchased a house in Medford,
and since I don't have a car, part of the house's appeal
was the potential for a Green Line extension.
I am also a voice teacher working out of the home and
it would greatly improve my business if non-driving
students could get to my home more easily.

Thank you,
Anita Suhanin

Then, be sure to send your comment letters to be received by Friday, January 8 to:
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us

1

I-305-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

January 8, 2010

Owner of Units 805 and 702
Glass Factory
Linda Tamulaites
688 Post Lane
Somerset, NJ 08873

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Fax: 617 626-1181 and email

Dear Secretary Bowles:

I-306-001 I am an owner at the Glass Factory Condominiums. When I bought my two units in 2005, I was given a book showing the proposed move of the Green Line Extension which in part influenced my decision to buy in the Lechmere area. It showed a beautiful station with trees and lawn all around. I was impressed as we all know how the existing Lechmere Station looks. I lived in Beacon Hill for 19 years so know the area well.

The whole area was changing for the better with new condominiums replacing derelict old buildings, vast improvement in green space and a beautifully designed new Green Line station. It was a good place to invest. With the current proposed changes to the station/extension, I am sure my property value will be negatively instead of positively affected what with trains, busses, elevated track and masses of parked cars so close to our building. This is not what I expected and planned for and does not have to be.

I am extremely concerned and upset about the proposed changes. When one looks out my windows on the 7th and 8th floors there will be vast parking spaces instead of green space and a less than attractive station. With the station 30-50 feet from the building, the noise level will be intolerable. The plans must be changed.

Following is a detailed list of my concerns:

EXTREME NOISE & VIBRATION

I-306-002 I am extremely concerned about the noise and vibration from trains & busses. The DEIR lists us as SEVERELY IMPACTED. Adequate mitigation may not be possible. The T must do everything it can to reduce impacts. They may need to give us new windows, insulation, etc. since there is not enough space to build a sound barrier wall behind the building. I lived on Beacon Hill when the T had to spend a lot of money trying to

I-306-001

Please see Comment Letter I-013 for responses to this form letter, and the additional response below.

I-306-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-306-002

decrease the sqeaking noise made by the trains as they left Charles Street Station and entered the tunnel under Beacon Hill. It would be prudent to avoid the same type of problem and expense by being proactive and changing the existing plans.

TRACKS ARE TOO CLOSE TO OUR BUILDING
The present design shows the tracks running very close to the rear of the Glass Factory building. I urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

MAINTENANCE FACILITY
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice, however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be

substantially reduced. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

This whole area is becoming a wonderful, beautiful addition to the City of Cambridge. The new and/or renovated condominiums, the park by the Charles River, the new hotels and a redesigned Green Line Extension should increase property values, hence tax revenue to the city. The plans as they stand now for the Green Line Extension are unacceptable and need to be changed. Please contact me if you need more input and send me any public notices or updates.

Sincerely,

Linda Tamulaites

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-307-001 As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-307-001

Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,

Ayesha Tariq
Signature

Ayesha Tariq
Print Name

169 OBrien Hwy Apt # 209
Address

Johnson, Holly (EEA)

From: Anne Tate [annetate@rcn.com]
Sent: Friday, January 08, 2010 7:43 AM
To: Johnson, Holly S (ENV)
Subject: EEA #13886
Attachments: DEIR Comment.docx; ATT13659599.htm

Secretary Ian Bowles

Executive Office of Energy and Environmental Affairs

MEPA Office

Attn: Holly Johnson

MEPA Analyst

EEA# 13886

100 Cambridge Street

Suite 900

Boston, MA 02114

Holly.S.Johnson@state.ma.us

I-308-001 I am writing as a planner with more than 25 years of experience, as the former advisor on Sustainable Development to the Office for Commonwealth Development and as a citizen of Somerville. I thoroughly endorse the Greenline extension with one substantial caveat. The Greenline maintenance facility should NOT be located at Yard 8.

I have worked with the city and EOT to consider the different sites. I have listened to presentations on the alternatives and reviewed the analysis of the different sites. I can find NO reasonable justification for the Yard 8 site. Any argument for the Yard 8 site is predicated on the refusal to consider the long term potential for redevelopment of the Inner Belt area.

I-308-002 The Inner Belt area is the largest and best situated piece of underdeveloped land in the Boston area. Over 95 acres, it is five minutes from MIT and MGH and downtown Boston, crossed by the Green and Orange lines, the commuter rail and the future Urban Ring. With those transit connections it will be linked directly to Harvard and the Longwood hospital district. Properly planned and built out, it has the capacity to hold more than 7

1

I-308-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-308-002

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

I-308-002

million square feet of development, create tens of thousands of jobs and generate hundreds of millions in tax revenue. The goals for Inner Belt development have been endorsed by Secretary Bialecki, and Secretary O'Connell before him. However, in spite of Somerville's clear objections, the Executive Office of Transportation has proceeded with plans for siting the Greenline maintenance facility at Yard 8, a choice that would seriously threaten the ability to develop the area now and in the future.

In sum, my professional judgment is that the Yard 8 option is a bad idea for many reasons. For example, it would:

- Place a train maintenance facility within 50 feet of a well-established residential development, the Brickbottom artist cooperative (with more than 100 passionate and vocal families), a community that has been the life blood of this part of the city for 20 years,
    - Extend train storage tracks for the entire length of the site's border to the Union Square district, a swath about a 2,500 feet long and 110 feet wide, cutting off the area from the populous and vibrant Union Square.
    - Require that to reach the site from the Union Square side, pedestrians and cars would have to descend down through dark, pedestrian-unfriendly tunnels, more than a hundred feet long, when the whole concept of opening the site to development is contingent on making a simple and attractive connection to Union Square,
    - Erect a maintenance building that would face the one viable major commercial street with a 300' long façade of grim blank wall.

The plan was originally presented to the community with a deceptive drawing showing the green line and storage tracks decked over with a plaza. It is impossible to understand from these drawings that, in fact, the plaza would be more than three stories above the adjacent street. To reach it, pedestrians would be asked to effectively climb up over an obstacle equal to a three-story house. In addition, this deck would be extremely expensive, and is not accounted for in the budget. The aerial perspective by EOT is wildly misleading and probably not even physically possible.

No one wants to imperil the Greenline, to slow it down or make it more difficult in any way. However, if the EOT Yard 8 scheme goes forward, the whole region will lose a strategically important economic development site, probably forever.

In addition, Somerville will once again be unfairly saddled with the burden of regional infrastructure while sacrificing its own economic interests, including its goal to become less dependent on the state for its financial survival.

There are alternatives. After the repeated prodding of the City of Somerville, EOT developed several alternatives and analyzed their feasibility. Several were quite good and yet, in spite of designing them, EOT claims they are not as viable as Yard 8. Two schemes, known as Mirror H, and L offer real promise. The H scheme:

- Locates the train yards and maintenance in Somerville, in existing train yards, next to the largest train maintenance facility in the state, with potential economies of operation,

- Is operationally feasible, as agreed by the MBTA,
- Saves money and time and is politically popular in Somerville
- Minimally effects the NorthPoint project, since the rail nuisance already exists there and is not leaving, and it uses planned parking garages to buffer the residential and office buildings,
- Would be quickly permitted in Somerville.

Alternative L appears to me to be less ideal but is still preferable to Yard 8. The land adjacent to the elevated highway I-93 is not suitable for residential or mixed use development and would likely be used for parking facilities in a redevelopment scheme for the area. Train repair is a suitable use for that site, although it is more expensive than the Mirror H site.

I would like to challenge some of the assumptions of the alternatives evaluations.

I-308-003

In the DEIR it is stated that "*Yard 8 is a former railroad property located in an industrial area that is currently zoned for this type of a facility*". While true, this statement completely ignores the serious, committed and ongoing planning efforts of the city and private developers to plan for long term development of the site as high intensity mixed use with a substantial jobs base. By contrast the dismissal of the Mirror H scheme hinges on the value of the NorthPoint development as a transit oriented development: "*Together, NorthPoint and the Charles E. Smith development would be important contributors to the Greenline Extension Project... it is crucial to account for their transit ridership contribution to the expanded Green Line ridership increases. It is also important to note that NorthPoint and the Charles E. Smith residential project are transit-oriented developments that can contribute to Green Line Extension Project's objectives to promote a decrease in automobile dependence within the study area.*" This criteria should be applied equally to the Inner Belt area.

Given the long time horizon for design and construction of the Greenline extension and fact that the extension will transform the region for the next century it seems both unfair and short sighted to base this evaluation on the fact that North Point is merely a few years ahead of the Inner Belt area in its evolution. To fairly compare the alternatives should require a longer view of their ultimate potential for redevelopment and job creation. Doing so would make it clear that the alternatives of "Mirror H' or "L" should be preferred over Yard 8.

The Greenline extension will transform East Cambridge, Somerville and Medford, providing important transit access to thousands of residents and workers, lowering the carbon impacts for the region, expanding the community path and ameliorating years of environmental injustice for these populace communities. This can and should all be accomplished without destroying the long term potential of the Inner Belt District. Alternative locations for the maintenance facility will allow Inner Belt to provide jobs, increase Somerville's tax base and address the growth needs of the Commonwealth's most important research and development sectors. Lets get this right from the start.

3

I-308-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Thank you the opportunity to express these concerns.

Anne Tate

Professor, Rhode Island School of Design

140 Sycamore Street

Somerville MA 02145

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

Dear Secretary Bowles

My name is Randal Thurston. I am writing to comment on the DEIR/EA for the Green Line extension project, EEA #13886. I strongly urge the Mass DOT to site its planned green line Maintenance facility and storage yards away from its intended location on yard 8, reconsider the design of the train stop that will serve our neighborhood and develop a comprehensive mitigation plan for both the construction and use of the extension.

I-309-001

If sited at yard 8, the noise, vibration and attendant stress of the storage yards and maintenance facility would greatly disrupt the lives of approximately 200 residents. Placing these two components of the green line extension so close to our residence would create undue hardship upon the individuals and families who live here. Although yard 8 might be seen as the easiest place to site the yards and facility, the environmental impact will be catastrophic to those of us in the Brickbottom community. The issues of noise, vibration, air pollution and water runoff containing toxic materials clearly demand an alternative site. Both of the two alternative sites, Mirror H and option L should be the subject of further careful study while Yard 8 should be removed from further consideration. I also feel that the MBTA BET facility which already occupies 47 acres is an underutilized resource and should be looked at as an opportunity to create greater efficiencies in siting of the Green line yard and maintenance facility.

I-309-002

With regard to the planned train stop in our neighborhood, I feel strongly that the drop off area should be eliminated. Having a drop off area will encourage commuters to drive to the station and will add significant additional traffic to our narrow streets. I am concerned also because my children walk home from school in the area of the stop and I feel that the additional congestion will be dangerous.

I-309-003

Concerning the actual construction of the project, I recommend that the best soundproofing materials available be used in deference to the surrounding population. I would also like to make sure that the DOT develops a construction schedule that limits as much as possible the disruption to residents who reside near its components. An appropriate and comprehensive plan for mitigation of the effects of construction and usage of the extension must be developed and integrated before construction begins and be continued for the life of the rail service.

I-309-004

The design and planning of the extension, support facilities and the T stop should be carefully integrated into the neighborhood and be mindful of its identity. Careful

I-309-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-309-002

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-309-003

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and

I-309-004

consideration should also be given to the fact that the inner belt and Brickbottom areas represent the last opportunity for significant development left in Somerville and therefore represents our future. Successfully pairing mixed-use development with an intelligently designed and sited public transportation system is critical to our city.

Our building is surrounded on two sides by railroad tracks. The regular noise and smoke from the cars is a problem that we deal with but one we knew we would have when we moved into the area. The trash transfer station, with its odors and ever increasing heavy truck traffic is a neighbor I am sure any community would rather not have. Additionally, we are bordered by the McGrath and O'Brian highway which has seen a steady increase in its usage over the 22 years that I have been a resident.

We are essentially a neighborhood located in a complex of 3 buildings. As one of if not the largest community of its type in the country, Brickbottom has become a focal point of the Arts in the greater Boston area. We are proud of our history and have tried to be a positive influence on the city of Somerville and the state of Massachusetts. While we have flourished in an area of the city that has few amenities, siting the yards and maintenance facility at yard 8 would signal the end of our long history producing and exhibiting art and showcasing related cultural activities.

When the Green line extension was announced, our community vigorously supported it because we believe that it is a fundamentally positive addition to public transportation, creating more access for our city's residents and providing an alternate to the vehicles that crowd our roads. We remain fully supportive of the extension, even though it will border our building on two sides and dramatically increase the noise we already experience. Somerville has been historically underserved by public transportation and the green line extension is a welcome if long overdue effort. The extension needs to be meticulously thought out and designed. We have one opportunity to get this project right and we should all make every effort to do so.

Sincerely yours, Randal Thurston
1 Fitchburg St. # C209
Somerville, MA
02143



inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

I-309-004

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

The Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson
DEIR project EEA#13886
100 Cambridge, MA 02114



Dear Secretary Bowles,

I-310-001

I am writing to express my disapproval along with over 200 immediate neighbors, the City of Somerville, many community groups, and Aldermen, over the use of 11 acres of Somerville land for the Yard 8 Maintenance Facility Siting. As a Brickbottom and Somerville resident, I am happy to see the Green line extension service our area. But the large train storage and maintenance facility as proposed in Yard 8 is a very poor choice and short sighted for us and the city. The impact on the residents will be adverse and any future development of the Inner Belt area for the city will be lost. Yard 8 does not meet the three criteria: quality of life, transportation access and economic development the the CIty of Somerville has requested of the MassDOT.

Please consider more community involvement in moving forward. We need a broader vision to arrive at the best solution for everyone. A citizen advisory committee could be the forum for this purpose.

More study of the Option L and Mirror H alternatives should be fully executed. Why is this not being done?

I-310-002

There needs to be a good process to address the mitigation problems DURING construction and after. Goals have not been stated and residents at Brickbottom are not satisfied with the process thus far.
DEIR Section 5.4.7-3 sound mitigation, page 5-118 states " At some locations projected to be exposed to noise impact, noise barriers may not be a feasible or effective means of mitigation" yet only 40 of the 155 units are designated for soundproofing. Why have the residents of Brickbottom been left short on noise and vibration mitigation?

I-310-003

The Brickbottom/Washington Street T station should be located at Washington street to better connect to East Somerville and access should be from both side of Washington Street not just one. The use of a kiss and ride at this station is a bad thing for the neighborhood. Relocating to Washington Street will also make for easy bus connections, something the proposed Joy Street does not have.

I hope that the in moving forward all parties can be treated fairly and in accordance with all laws. Yard 8 is not an acceptable option for the large storage and maintenance facility, MassDOT should do its job and fully explore Option L and Mirror H.

David Tonnesen
1 Fitchburg Street C-113
Somerville, MA 02143

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I-310-001

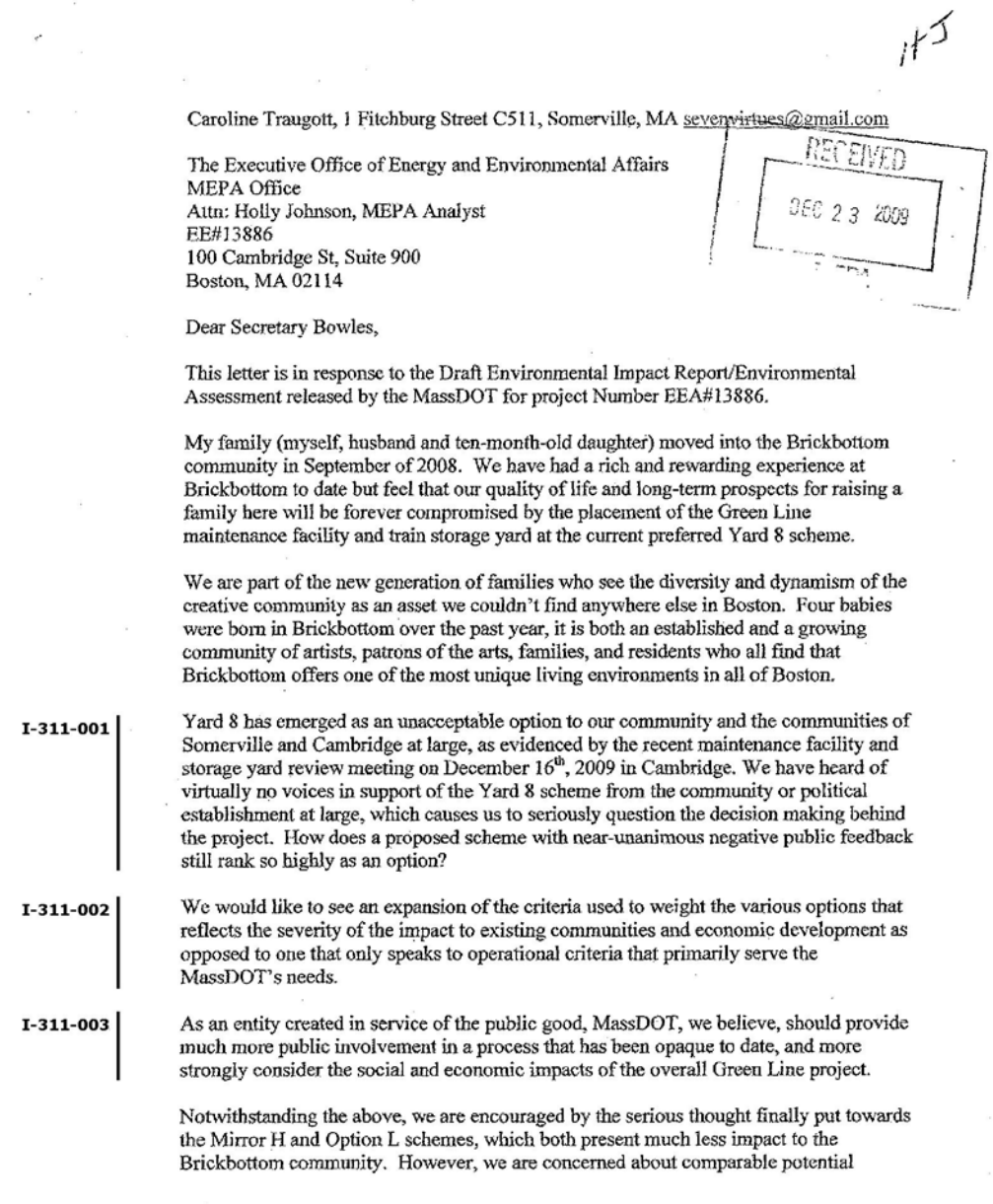
An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-310-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-310-003

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.



Caroline Traugott, 1 Fitchburg Street C511, Somerville, MA sevenvirtues@gmail.com

RECEIVED
DEC 23 2009

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Bowles,

This letter is in response to the Draft Environmental Impact Report/Environmental Assessment released by the MassDOT for project Number EEA#13886.

My family (myself, husband and ten-month-old daughter) moved into the Brickbottom community in September of 2008. We have had a rich and rewarding experience at Brickbottom to date but feel that our quality of life and long-term prospects for raising a family here will be forever compromised by the placement of the Green Line maintenance facility and train storage yard at the current preferred Yard 8 scheme.

We are part of the new generation of families who see the diversity and dynamism of the creative community as an asset we couldn't find anywhere else in Boston. Four babies were born in Brickbottom over the past year, it is both an established and a growing community of artists, patrons of the arts, families, and residents who all find that Brickbottom offers one of the most unique living environments in all of Boston.

I-311-001 Yard 8 has emerged as an unacceptable option to our community and the communities of Somerville and Cambridge at large, as evidenced by the recent maintenance facility and storage yard review meeting on December 16th, 2009 in Cambridge. We have heard of virtually no voices in support of the Yard 8 scheme from the community or political establishment at large, which causes us to seriously question the decision making behind the project. How does a proposed scheme with near-unanimous negative public feedback still rank so highly as an option?

I-311-002 We would like to see an expansion of the criteria used to weight the various options that reflects the severity of the impact to existing communities and economic development as opposed to one that only speaks to operational criteria that primarily serve the MassDOT's needs.

I-311-003 As an entity created in service of the public good, MassDOT, we believe, should provide much more public involvement in a process that has been opaque to date, and more strongly consider the social and economic impacts of the overall Green Line project.

Notwithstanding the above, we are encouraged by the serious thought finally put towards the Mirror H and Option L schemes, which both present much less impact to the Brickbottom community. However, we are concerned about comparable potential

I-311-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-311-002

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-311-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes

impacts to the community and future development presented by Mirror H, to our Cambridge neighbors.

I-311-004

We would like MassDOT to focus on options within its existing controlled land, as well as additional options which have the characteristics of Option L (bordering existing MassDOT land holdings, not directly impacting from residential communities, and not stunting future economic development adjacent to the Green Line). We believe that MassDOT needs to be fair in its dealings and negotiations with any businesses that might be impacted by a maintenance/storage facility and support their relocation and continuity of service.

All along the existing above-ground Green Line we see tremendous economic development and communities that have thrived due to its presence. All we ask for is to be a true extension of the Green Line platform, enabling smart transit oriented development of our city and preserving, if not enhancing, the truly unique cultural and community assets of our town, of which Brickbottom plays a major part.

Sincerely,

12/21/09

Caroline Traugott

MassDOT's plans for public outreach in the next phases of the Project. As stated in Section 6.4, MassDOT and the MBTA will convene a Green Line Extension Design Working Group. This group will advise the agencies on design workshops, participate in the workshops and serve as a corridor advisory group during design.

I-311-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Dave Tremblay [datremb68@hotmail.com]
Sent: Friday, January 08, 2010 10:13 AM
To: Johnson, Holly S (ENV)
Cc: Fichter, Katherine (DOT)
Subject: Green Line Extension Comments - 34 Murdock St, Somerville
Attachments: Green Line DEIR Comments - 34 Murdock.pdf

Ms. Johnson and Ms. Fichter,

I-312-001

Please note the attached letter regarding comments on the Green Line Extension Project's DEIR/EA document. I am generally in favor of the Project and I believe you have a well thought out plan overall. I have concerns that the preliminary design did not provide any noise mitigation to my residence despite my belief that my residence will have an increased noise level and already falls above the threshold for relief. I believe these concerns would otherwise be addressed as the design is progressed, but submitting them in the public comment process will help ensure that they are each recorded and considered.

Thank you,
David Tremblay

Your E-mail and More On-the-Go. Get Windows Live Hotmail Free. Sign up now.

1

I-312-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: MBTA Green Line Extension

Dear Sir/Madam,

I am writing on behalf of the condo association at 34 Murdock Street in Somerville. We are generally in support of the Green Line Extension project, however, that support anticipated that the MBTA would provide measures to mitigate any increased noise, vibration and other environmental impacts. After reading the DEIR/EA document and the Noise and Vibration Technical Report, it became clear that the preliminary design does not provide any mitigation for our property despite a foreseeable increase to our noise levels. The Green Line Extension analysis appears to be using outdated base maps and doesn't address several operational changes and ripple effects from other elements of the project design. Although these issues may be addressed as the design progresses, our primary opportunity to voice our concerns and comment on the design is through the DEIR/EA process. Our concerns with the available design information are as follows:

I-312-002

- **The "Base Map" is at least 3 years old and doesn't include new structures like our condo.** The Condo at 34 Murdock St was constructed in 2006/2007. The base map that is shown in many of your documents shows a previous residence that was further from the tracks and also appears to show a structure that could have potentially provided noise mitigation (unclear image). This base map would have hindered the noise and vibration analyses done by Harris Miller Miller & Hanson.

I-312-003

- **Our Property is subject to potential land acquisition.** This was not anticipated by us and could have a significant impact if it reduces the available parking within our property. We assume this will be addressed as part of the land acquisition process; however it's unclear how our property will be valued. A small parcel could render a larger portion unusable for its original purpose. When combined with the likelihood that additional street parking will occur or be restricted due to our proximity to the Lowell St Station, this could be a significant impact. We would hope that the valuation methodology considers more than just square footage.

I-312-004

- **The Preliminary Design indicates a retaining wall will be built at the edge of our property.** Although the wall itself doesn't directly impact us, it appears that an existing fence, vegetation and two or more significant trees would be impacted. These items are currently our only noise mitigation measures and the trees provide a noticeable noise reduction for approximately 6 months out of the year which is especially valuable because they are higher than most noise barriers (and far more attractive). In addition, the retaining wall and land acquisition will reduce our options for any noise mitigation measures that we could install; the wall may include foundations or tie-backs which could interfere with roots or fence posts. An integrated retaining wall and noise barrier would be a more efficient use of the available land, and it was disconcerting that such a structure was not part of the original proposal. In addition to the noise, we would like some assurances that the retaining wall be designed and constructed in a manner that will not impact the water table and cause an increased likelihood of water infiltration into our basement or settlement cracks.

I-312-005

- **The Noise and Vibration Technical Report indicates that the noise level for the Murdock St abutters is among the highest on the proposed green line corridor.** According to Figure 1 on Page 6, 75 dBA is the HUD threshold for Unacceptable Housing Environment and on page 43 the report states that "The Project would mitigate both moderate and severe noise impacts wherever practical and wherever existing noise levels are above 65 dBA." According to Table 7, the Murdock St existing noise level is 80.1 dBA. This is among the highest readings on the proposed extension and even a slight increase would put the noise level in the Severe range. The likely cause of these high readings is the "canyon" effect caused by the sound reflected off the Somerville DPW building across the tracks from Murdock Street. The potential mitigation measures that were

I-312-002

Potential noise impact has been assessed at an exterior location at 34 Murdock Street which is appropriate for the existing building's location on the parcel. Future noise conditions at this location are expected to decrease slightly due to the relocation of the commuter rail tracks further away from this receptor. The Green Line trains do not significantly contribute to noise impacts at this receptor. Therefore, no noise mitigation is proposed for this location.

I-312-003

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-312-004

MassDOT will not remove any trees outside of the existing right-of-way or proposed acquisition areas. Retaining walls and noise mitigation measures will be designed during the preliminary engineering phase of the Project.

I-312-005

All noise barriers proposed as mitigation for the Project will be made of an absorptive material to minimize the potential for reflections. The need, feasibility and effectiveness of including absorptive materials on other elements of the Project such as retaining walls will be assessed during the final design of the Project. Generally, potential modification to property outside the right-of-way, such as the Somerville DPW building, is not practical since the property is not owned or maintained by MassDOT.

I-312-005

included in the report did not discuss adding a sound absorbing material to the exterior of the DPW building. Reducing the reflected sound in addition to a noise barrier may prove to be more effective than a noise barrier alone because any noise reflecting off the DPW building is going to be above the noise barriers. It is unclear in the report if innovative options like this were/will be considered.

I-312-006

- **A Noise Barrier is not indicated for our property, however a nearly identical property 3 units away does include a noise barrier.** A nearly identical condominium was constructed 3 parcels north as shown in figures 2 and 3. This condo is also not shown on the base map, however their property does get a noise barrier. Also, two of the four structures on Murdock Street that are shown as having Moderate impact are further from the tracks than our condo unit (as shown in figure 3).

I-312-007

- **The Preliminary Plan indicates adding noise barriers across the tracks from our property that will increase the amount of reflected sound**. According to the Noise Mitigation diagrams, barrier #12 will be constructed from the south end of the DPW building across Charles E. Ryan Rd and continue south. The current DPW building provides reflection of the sound for approximately 60% of our view accross the tracks. The additional wall will add an additional surface to reflect noise from the remaining 40%. In addition to this surface, the trees that currently screen our property from noise originating in this direction will likely be removed by the Project as noted above.

I-312-008

- **No indication that certain operational issues of trains have been considered.** Although operational issues are discussed in the report, there was no indication that operation of the train horns has been considered or addressed. Most trains sound their horns as a warning when they are approaching workers or others who are near the tracks. The analysis doesn't discuss whether the Project anticipates that the Commuter Rail and Amtrak trains are likely to sound their horns when approaching green line platforms. Is the Green Line's outbound track a sufficient separator between the Commuter Rail lines and the Green Line platform so that the horn will not be necessary? Will the Green line trains be sounding a horn every time they approach the station or only when they are bypassing the station? Since we are very close to two stations (Lowell St and Ball Square), these horns from trains going in different directions could cause a significant increase to the "annoyance level" of the passing trains. Have these issues been considered in your Noise report and are the neighboring properties being identified for mitigation efforts?

If you have any questions or need clarification of any of the concerns that I've raised, please don't hesitate to contact me. The following pages have several figures to clarify where 34 Murdock St is and what figures I was referencing from your documents. Hopefully these will expedite your review.

Thank you for considering our concerns with the preliminary design. While we generally support the Commonwealth's efforts to extend the Green Line into our neighborhood and appreciate the work that the project team has done to mitigate its impacts, we do feel that we have been unfairly neglected in these efforts. We hope that you can address our concerns in a satisfactory manner and reassure other abutters that they will also be given fair treatment when the design is further developed.

Sincerely,

David Tremblay
34 Murdock St, Unit C
Somerville, MA 02145
datremb68@hotmail.com

cc: Katherine Fichter

I-312-006

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-312-007

Please see response to Comment I-312-006.

I-312-008

While commuter and other trains may sound their horns when approaching construction crews, the instances will occur during daytime hours. Commuter, Amtrak and freight trains will not sound their horns due to nearby passenger platforms. A fence will separate light rail tracks and platforms from the commuter/Amtrak/freight railroad. This eliminates potential railroad conflicts and the need for trains to sound horns.

Figure 1 - Existing Conditions from Green Line DEIR/EA documents. Yellow arror highlights 34 Murdock Street parcel. Structure is incorrect. Proposed Retaining wall in Blue.

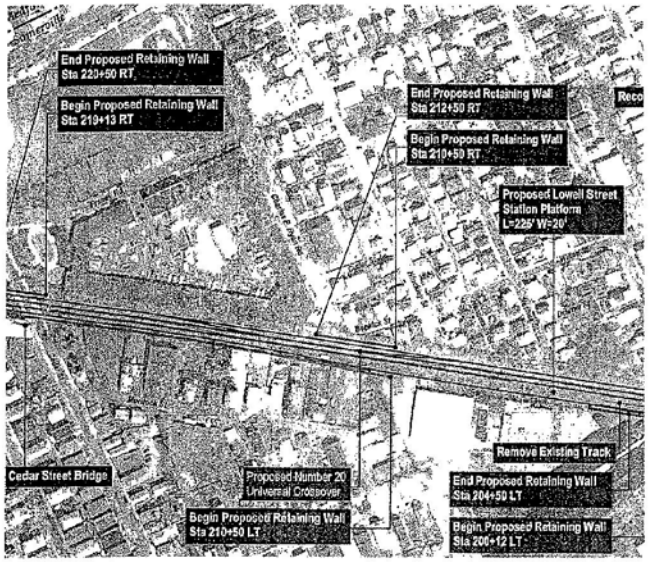


Figure 2 - Current view of 34 Murdock Street.

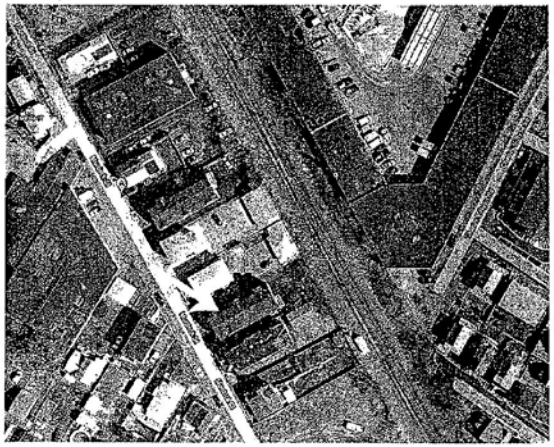
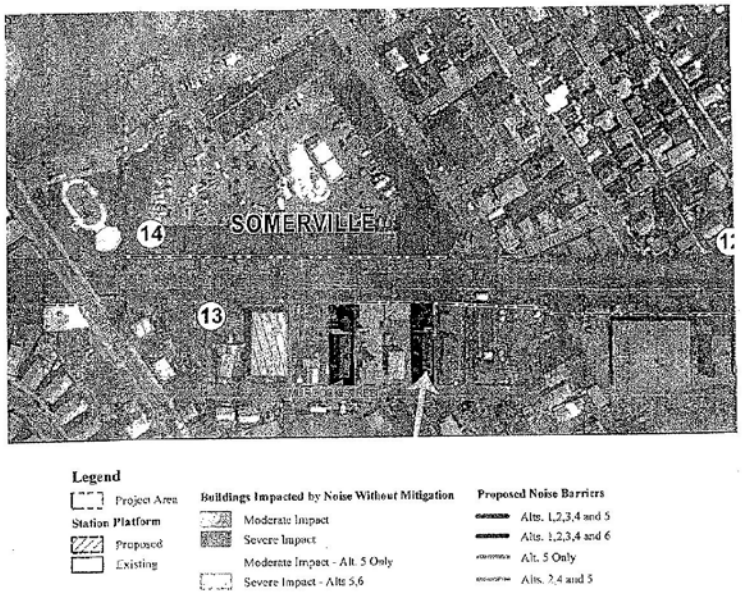


Figure 3 - Updated base map including 34 Murdock St (yellow arrow) and neighboring nearly identical condo. Proposed noise barriers are shown in blue.



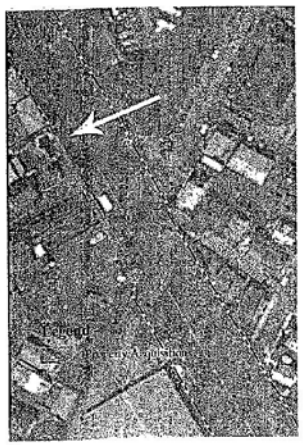


Figure 4 - Proposed property Acquisitions.

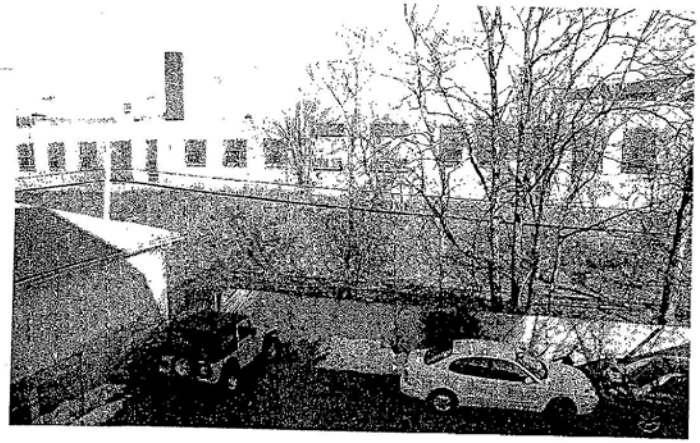


Figure 5 - View from Bedroom window. As tracks are moved away, both commuter rail lines will have unmitigated noise effects. Also trees are at risk when retaining wall is built which further exposes our structure to rail lines.

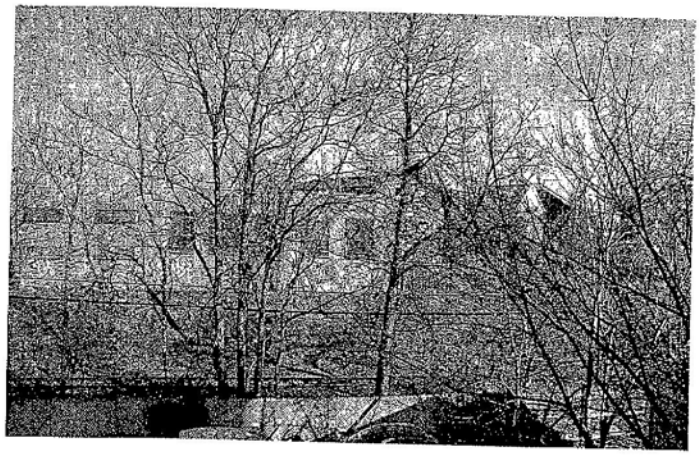


Figure 6 - View from Bedroom window. Additional noise barrier is proposed to extend to the south from the DPW building. Currently screened by trees that are in jeopardy.

Mr. Daniel Tremitiere
1 Fitchburg St. Apt C519
Somerville, MA 02143

FAXED

RECEIVED
JAN 8 2010
MEPA

January 5, 2010

Secretary Ian Bowles
The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) on project EEA#13886, the MBTA Green Line extension in Somerville and Medford. I look very much forward to the expansion of the Green Line in my community and neighborhood; overall, the project is a considerable victory for the City of Somerville, which has historically been underserved by the MBTA despite its central location and sizable transit-dependent population. I am hopeful that the Green Line extension can become a catalyst for redevelopment and growth in the many neighborhoods it will serve.

I-313-001

However, I have very serious concerns about the project as currently planned, and about the draft report. Many aspects of the project are either poorly or inadequately planned at this stage. The EOT has stated that the design is unfinished and details will be finalized later. However, these details will have a considerable influence on the environmental impact of the project as well as on the lives of the tens of thousands of people who will live near and use the line on a day to day basis.

I-313-002

It is my opinion that the DEIR as written is an insufficient response to the many concerns presented by the City and residents of Somerville, and is not in any way appropriate for adoption as a final Environmental Impact Report. The report fails to respond to major community concerns about the maintenance facility and noise mitigation, and relies in many cases on incomplete or incorrect assumptions to reach entirely untenable conclusions. To fail to address these concerns will imperil the quality of life and well being of scores of Somerville residents, and could set the City's economic development plans back many years. These errors must be corrected, and plans altered accordingly, before the project is allowed to go forward.

<u>The Yard 8 Maintenance Facility is Unacceptable</u>

My primary opposition to the DEIR as written is the EOT's continued reliance on the "Yard 8" site as its preferred option for a Green Line maintenance facility. EOT proposes to build a multi-story maintenance facility, sized to service and store cars for the *entire* Green Line, on a parcel of land immediately adjacent to the Brickbottom Artists Buildings in the Inner Belt neighborhood. As residents of Brickbottom and officials from the City have repeatedly pointed out, the Yard 8 location will have a disastrous impact on the quality of life of those living at Brickbottom – a diverse and well-established

I-313-001

The DEIR/EA and FEIR include conceptual Project designs. Designs for each station, the storage and maintenance facility, and the entire project alignment will be refined during the Project's preliminary engineering stage. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-313-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-313-003 community of 220 residents, many of whom work and live in the building full time. It is my belief that the Yard 8 maintenance facility fails to meet the requirement that "no segment of the population...should bear a disproportionate burden of environmental impacts" for the project, as stated in the Secretary's Certificate (EENF, *Environmental Justice*, p. 7).

I-313-004 The DEIR as written downplays the impact of the maintenance facility by citing noise levels for Green Line operations, and suggesting that the increased noise from the Maintenance Facility will be incremental. However, the Green Line will operate only from 5am to 12am daily; the planned maintenance facility will operate 24 hours a day, likely with some of its busiest work being done during the hours when the Green Line is not running. The DEIR does not include a projected noise impact for the maintenance facility during those 5 hours a day when the Green Line trains will not be running. Without an analysis of that noise impact, the DEIR does not adequately assess the noise impacts of the project on the Brickbottom community.

I-313-005 The maintenance facility as planned also represents an unfair burden on the City of Somerville. As the City has pointed out, the Inner Belt neighborhood represents one of the City's best options for economic growth and development in the next decade. Business growth in the district has been strong, and the area is an integral part of Somerville's plan to build a more solid commercial base in the coming years. Locating the maintenance facility in the Yard 8 location will divide the district, making it unsuitable for many development projects that have been proposed for the area.

I-313-006 Moreover, the EOT's plan to relocate *all* Green Line maintenance to Somerville is an unnecessary addition to the project which unfairly shifts the burden of maintaining Green Line infrastructure from other communities to Somerville. The DEIR proposes shifting car storage for the B, C, D, and E branches of the Green Line to Somerville, for reasons apparently unrelated to the Extension project. This car storage will create additional noise and occupy additional land in Somerville while providing no benefit to the community – a development in no way consistent with the environmental goals of this project. Somerville is already host to maintenance facilities for MBTA's Commuter Rail infrastructure, despite the fact that Commuter Rail trains do not stop in the city. As such, if any maintenance and storage is to be introduced as part of the extension project, it should be limited to serving the cars and infrastructure necessary to support the extension.

I-313-007 EOT has proposed two alternate maintenance facility locations: "Mirror H" and "Option L." It is my opinion that either of these locations would be a significant improvement over the "Yard 8" site. I feel strongly – as does the Brickbottom community and the City – that **"Yard 8" should be taken off the table immediately** so as to focus energies on the "Mirror 8" and "Option L" alternatives.

Noise Mitigation Recommendations are Insufficient

I-313-008 The DEIR as written also includes the beginnings of plans for the noise mitigation which will be necessary to offset the impacts of the Green Line extension. However, these plans are not sufficiently detailed to be adequate for the final EIR, and are in many cases based on incomplete data or inaccurate assumptions. Prior to the adoption of a final EIR, EOT must provide concrete mitigation proposals, with specific mitigation goals and a process of redress to be employed if those targets are not met.

I-313-009 In the specific case of Brickbottom, the Green Line extension will, at its closest point, run 19 feet from the windows of long-time residents. The DEIR states that impact from the Green Line extension alone would be "severe" according to Federal standards. The document nonetheless proposes mitigation of only 40 of the 155 residences at Brickbottom, and provides neither details of how mitigation is to be

I-313-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-313-004

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-313-005

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-313-006

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. In order to maximize operating efficiencies, the facility must be constructed within

I-313-009
I-313-010

performed nor explanation of how the figure of 40 residences was determined. EOT has not engaged in any dialog with our community about mitigation efforts; indeed, in many supporting materials they have gotten basic facts about the Brickbottom complex (such as the number of buildings) wrong. As such, we can only guess at what steps might be taken – but it is difficult to envision that a solution treating only 28% of residences could possibly be adequate given Brickbottom's proximity to both spurs of the Extension. Moreover, the Brickbottom complex is a historic structure eligible for official designation;

I-313-011

modifying windows or other exterior façade elements on only 28% of units would undoubtedly run afoul

I-313-012

of legal protections regarding the appearance of designated historic structures. Finally, not one word of the report address indoor air quality impacts of any element of the project – the extension, the maintenance facility, or indeed, the mitigation. If mitigation is to focus exclusively on windows and soundproofing, as EOT has implied, what are residents to do in warmer months? (The award-winning Brickbottom courtyard, the only outdoor green space in the Brickbottom/Inner Belt neighborhood, has been excluded entirely from mitigation considerations in the DEIR, so gaining relief from the heat there is unlikely to be an option.)

I-313-013

The final EIR must include a comprehensive mitigation strategy for noise, vibration, and air quality impacts on the whole of the Brickbottom community. Targets should be set for maximum noise levels within units, relative to baseline measurements taken before the beginning of the project. There must be a process to ensure that these targets are met, and to provide redress if they are not. And finally, the mitigations at Brickbottom must be done in a manner consistent with the historic integrity of the Brickbottom complex.

The Green Line extension represents a "once in a lifetime" opportunity for Somerville, Medford, and the MBTA – a point which the EOT has underscored in its public comment sessions. With that opportunity, however, comes responsibility: the consequences of poor planning and shortsighted decisions will also be felt for a generation to come. We in Somerville and at Brickbottom cannot afford to carry the burdens of this expansion on our backs alone. I encourage you to refrain from hurrying this process; let's take the time to correct these oversights and build a Green Line extension that can serve our communities without disrupting the community's environment, economic development, and quality of life.

Sincerely yours,
Dan Tremitiere
Dan Tremitiere

the same timeframe as the Green Line Extension Project, in the vicinity of the Green Line Extension right-of-way, and north of downtown Boston.

The storage and maintenance facility alternatives include storage for Green Line Extension vehicles and replacement of the existing Lechmere Station vehicle storage. Storage capacity is also provided for vehicles currently stored in trackways between Lechmere Station and Government Center; this storage will be lost due to the Green Line Extension.

I-313-007

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-313-008

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-313-009

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further

consideration and Option L is identified as the preferred maintenance facility site.

I-313-010

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-313-011

Section 6.5.4.7 of the DEIR/EA identifies proposed mitigation measure for historic resources. Mitigation measures would be determined by the FTA and MassDOT in consultation with the Massachusetts Historical Commission and other consulting and interested parties.

I-313-012

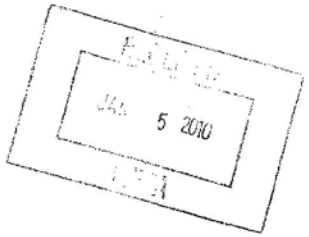
The Green Line Extension will have a positive impact on outdoor air quality within the study area. Indoor air quality is unique to each individual building, and is outside the scope of this project.

I-313-013

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

HJ

Steven A Troian
183 Boston Ave
Somerville, MA 02144



January 2, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114
Fax: 617-626-1181
Email: Holly.S.Johnson@state.ma.us

Dear Secretary Ian Bowles:

I am a resident at 183 Boston Ave in Somerville Ma accross from where the proposed long-term green-line terminace will be for the green-line connecting to the West Medford neighborhoods as the second phase of the extension to the green-line upon completion of the Tuffs terminace.

I have owned this property for a little over 20 years. Our property is in Somerville but borders Medford two houses up the street and West Medford about six houses down the street. The proposal of bus destination would require removing at least half or more of our parking to accomidate the proposed third turn-in lane. The not so funny thing is that we would not be able to park up the street or down the street because our Somerville registered car would be parked in Medford.

I know from going to the meetings that we are going to be having some additional noise from being at the end and be the turning point.. The bus depot in and out across from my house will also be both noisy and have some bus orders. I know and appreciate the efforts for trying to keep both of those at a minimum In adddition to that, we have always had easy parking there and now maybe nothing.

My ideas that would have less of an impact direcdly on us would be as follows:

I-314-001 (1) Instead of making the West Medford stop a bus station type drop off / pick up terminace requiring a third lane of traffic, keep that at Tuffs and just have a walk and bike up station leaving us with the green-line turn around but not a lot of bus traffic. This would have less impact on our parking which would be a help to me. This will also save the removal of two large comercial rental buildings saving the State taxpayers the cost to

I-314-001

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-314-001

purchase the properties and also the City taxpayers the loss of real estate taxes from these properties. We would hate to see this happen because the owners have been good neighbors in our neighborhood over the years.

I-314-002

(2) We own a two family and we really require 4 parking spaces somewhere if not on the street because of the third lane then maybe deeded spaces in the garage where the proposed buildings are to be purchased and demolished. You did not want parking at this terminace anyway so if deeded to us instead of demolishing you would become a good neighbor in our nationhood.

I-314-003

(3) On the odd number side of Boston Ave, our houses are close to each other (3 feet on one side and 10 feet on the other). We are also very close to the street and where the proposal of a third lane is in consideration, if you felt deeded parking for us in the current garage would be out of the question then I would ask that we be deeded maybe 10 feet to the front of the 9 houses on the odd side of that Somerville section and allow us to have a pull in driveways in front of our houses. It will require us to remove a portion of our porch but it will be worth it to have the parking.

Thank you in advance for hearing my ideas

Sincerely,

Steven Troian

I-314-002

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-314-003

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

The Executive Office of Energy and
Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

January 3, 2010

Dear Secretary Ian Bowles,

I write to address the issue of the proposed DOT Maintenance facility located at Yard 8 in Somerville. I have lived in Somerville for the past 11 years, in and around the Union Square area, currently at Brickbottom on Fitchburg Street. I am an enthusiastic supporter of public transportation and the Green Line extension in particular, as I commute daily to Downtown Boston.

As a practicing licensed architect, I fully understand the need for service facilities for large infrastructure projects. I also understand that proper siting and consideration of urban planning issues is critical for the success of the project now and in the future. Think only of the Central Artery project, which demolished neighborhoods, cut off others from the rest of the city, and destroyed the heart of Boston. At the time, neighborhood concerns were ignored, but only a short few decades later, we spent billions of dollars to tear it all down. This historic example (only one of many) should drive home the need to examine the larger impact of such infrastructure projects within the larger community that they supposedly serve.

There are numerous considerations:

I-315-001
- The land proposed for Yard 8 is currently zoned for development. Given the increasing vitality and development of Somerville, to remove this land from the tax base and from development opportunities is short sited.

I-315-002
- The adjacent Brickbottom community is a longstanding community, a pioneering live/ work neighborhood that has spawned other such communities both in Somerville and in other cities. A maintenance facility would have a significantly detrimental impact on these residents – in contradiction to the specifically stated standards of the Mass DOT (see the Secretary's Certificate EENF Environmental Justice, pg 7) that states " no segment of the population should be denied environmental benefits, or should bear a disproportionate burden of environmental impacts". Please note that this community includes at least two dozen children, as well as 220 residents.

I-315-003
- There are two alternate sites that should be considered, in particular the Mirror H scheme, which is preferred not only by the local community but also the entire City of Somerville. The Green Line Extension should be considered as a way of stimulating the development and rejuvenation of the City of Somerville – it has already stimulated significant growth in property values in the union Square area. The current proposal sacrifices a vast swath of land that is ripe for development and undermines the ability of the east portion of Somerville to continue to develop in a beneficial and economically desireable manner.

I-315-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-315-002

Please see response to Comment I-315-001.

I-315-003

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

I-315-004

- We understand that there is a mandated deadline for the completion of the Green Line Extension, in 2014. However, it is also clear that the design of the maintained yard is not a part of that deadline, and can be evaluated in a more thorough and comprehensive way.

I urge the Urban Planners involved with this project to re-evaluate the many considerations that lead to the decision to site the yard in the current proposed location. Critical evaluation and reevaluation of any proposed design can only make a project stronger -- not only in its physical realization but also in its support from the community around it. I urge the planners to seriously consider the many and complex ramifications of the current plan. This project will last more than the next few years; it will have impacts that will last for generations. Remember the central artery project. And the resulting big dig....

Sincerely,

Catherine Truman AIA, LEED AP

I-315-004

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

From: 01/08/2010 16:31 #014 P.001

Ivy A. Turner
169 Monsignor O'Brien Hwy. #215
Cambridge, MA 02141
617-308-4897

January 8th, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am the owner and resident of unit 215 at the Glass Factory Condominiums. This two bed, two bath, renovated condominium is the home closest to the proposed new Lechmere Station and closest to the tracks. I have very serious concerns about the Green Line Extension Project.

Like many owners I purchased my home with the expectation the new station would be the beautiful glass one planned by the North Point developers. I saw the model at North Point which showed the new train going underground and was told the tracks would be underground or at grade. I would never have selected and purchased this condo if I knew you would build elevated tracks right outside my windows. I selected this unit because there are windows all the way across each room and beautiful evergreen trees and birds right outside the windows. It is quiet and peaceful and I love living here.

I-316-001 I was alarmed and outraged to discover you are planning to build elevated tracks and are planning to put them within the green space behind my building. These tracks will be so close to my windows that my home may no longer be inhabitable. The visual impact of tracks so close to the windows will destroy the
I-316-002 appeal of my home. Sunlight will be severely reduced and privacy compromised. I understand the busses will be directly under the tracks. The noise and vibrations from trains and busses right under my windows will be impossible to mitigate. Neighbors in the front of the building tell me they are frequently woken up by the loud noises from groups of people getting off busses and talking, yelling etc. at the current Lechmere station. The busses are currently much farther away that what you are proposing behind the building. Additionally I am severely allergic to cigarette smoke and am very concerned about people smoking while waiting for busses right beneath my windows. This is such a serious health concern that it would force me to move. This would likely mean selling at a loss. That brings us to the next issue, loss of value.

In addition to living here I work as a real estate broker in the Glass Factory. Right now condos facing the back of the building have seen a drop in value of $70,000 + below the value of the front units specifically because of the Green Line Extension Project. It is possible values will be lowered further once the tracks are up, light and views blocked and vibrations felt. Some units in the back have already become unsaleable due to the uncertainty about the location of the tracks behind the building. A 2nd floor

I-316-001

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

I-316-002

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

From: 01/08/2010 16:31 #014 P.002

I-316-003 one bedroom condo was foreclosed this week for this reason. The DEIR lacks sufficient detail about the location of the tracks. It does say the Glass Factory will be severely impacted but does not show a plan for acceptable mitigation nor state that acceptable mitigation is even possible.

50% of the homes in the Glass Factory building face in the direction of the Green Line Extension. If the new tracks are too close to the building (as you currently propose) the value of these condos will drop even further. Many owners here bought at the height of the market. The significant loss in value resulting from the Green Line Extension will cause financial ruin for many owners. They will not be able to sell their homes for enough to pay off their mortgages. Therefore I propose that acceptable mitigation include paying each owner for the loss in value caused by this project. I estimate the loss of value would be $100,000/unit on the 2nd & 3rd floors and lesser amounts on the higher floors unless sound and vibrations turn out to be severe on the upper floors as well.

I-316-004 I urge you to preserve all the large trees behind the building since they are a more attractive and
I-316-005 effective visual screen that you could ever build. Please move the tracks as far back as possible and do
I-316-006 all you can to reduce the mass of the tracks. At the very least the tracks should be beyond the fence that separates our green space from the T property. Move the busway even farther away from the Glass Factory and put as much attractive landscaping as possible behind our building.

My parking space is located in the outdoor lot. The proposed new station is right behind this parking area and almost against the windows of my bedroom. This is simply too close. I don't want to feel like I am parking and living in a T station. There is plenty of empty land to allow moving the station toward the south east. Why are you putting in right on top of my home?

I-316-007 The design of the new station is entirely unacceptable and will affect this neighborhood negatively for decades. Please build an attractive station. I understand you can't afford the glass structure we were expecting but surely you can do better than the design we were shown. There are brilliant designers out there, why not have a competition like the one that worked so well for Charles MGH?

Additional concerns:
I-316-008 Mirror H Maintenance Facility: Outrageous, absolutely not.
I-316-009 Surface parking: Too much, use existing underutilized garages and create green space instead.
Pedestrian crossings: Unsafe. Don't repeat the mistakes of Leverett Circle.
Bikeways, pedestrian paths: Do it right, make this area pedestrian & bike friendly.

I hope your project managers and engineers will continue to work with Glass Factory owners and residents to make this a better project, to find adequate mitigation and to protect our homes & investments. Thank you for hearing my concerns.

Sincerely,

I-316-003

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-316-004

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

I-316-005

FEIR Chapter 5 describes the revised conceptual plans for Lechmere Station, including station design, track alignment, bus routings, and other elements. Changes to the track alignment depicted in the DEIR/EA were evaluated, but could result in additional impacts on area abutters. Proposed mitigation measures for area abutters are also described in FEIR Chapter 5. During preliminary engineering, specific station design elements will be further developed.

I-316-006

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station

design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

I-316-007

The revised conceptual plan for Lechmere Station, as shown in FEIR Chapter 5, is entirely on MBTA property. This conceptual design does not require any Glass Factory property or the removal of trees and landscaping from Glass Factory property. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, outlines how MassDOT will involve residents in developing landscape design.

I-316-008

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-316-009

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

Johnson, Holly (EEA)

From: Peter Ungaro [peterjungaro@gmail.com]
Sent: Thursday, January 07, 2010 4:04 PM
To: Johnson, Holly S (ENV)
Subject: Comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-317-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner -- that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.

1

I-317-001

Please see Comment Letter I-002.

- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice.** The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate.** The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized tation designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Peter J. Ungaro
1 Monument Street
Medford, MA 02155

HJ

1 Fitchburg Street
C-109
Somerville, MA 02143
December 17 2009

The Executive Office of Energy and Environment Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst: EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114



Reference to Project Number EEA #13886

Dear Ms Johnson, dear Secretary Bowles,

I write to you regarding a portion of the Green Line extension project. I am a supporter of the extension, even though it will have negative consequences for my home. I understand that there is a greater good that needs to be served. As a resident of Somerville, I am acutely aware of the uneven distribution of services and costs in the public transportation sector – we seem to get too get few benefits (count the T stops in Somerville) and pay dearly. The current extension will add T stops. I write to you about the price.

I-318-001

I write in particular regarding two issues: the plan to locate the maintenance facility and storage yard in what is known as Yard 8, and the planned levels of mitigation for the Brickbottom Artists Building, which the extension will 'embrace' with tracks. Despite many well-attended public meetings in which politicians, residents and concerned citizens responded with near unanimous consensus that Yard 8 was unacceptable, the Department of Transportation to this day prefers to locate its facility and yard there.

The reasons against it are multiple. By the DOT's own metrics, the sound levels would be extreme. They speciously compare the maintenance facility's noise to the sound level of the occasional passing train – but it is not only louder, it will be continuous and unrelenting. The storage yard's main operating hours are at the end of the day (after midnight) and the start of the day (before 5am), with the rest of the day punctuated by trains on both sides of the building. If we are sealed into our building with sound-proofed glass, 150 units will be forced to turn to 24/7 air conditioning – environmentally tragic and financially difficult for many of the artists who live and work in the building.

Despite nearly two years of protest against the Yard 8 plan, the DOT and its predecessor have persisted, refusing to study other proposals until very recently. Now, it's a race against the clock. A decision that will profoundly affect the 200+ residents and workers in this community, and that will for decades to come effectively cut off the Inner Belt area from much needed economic development (and deprive Somerville of a much needed tax base) has been stubbornly – and negligently – skewed in one direction. This

I-318-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

sort of blind expediency will kill a vulnerable artistic community, one that has done much to revitalize the area; and it will kill the chances for economic expansion into the Inner Belt. Paradoxically, a move inspired by environmental concerns has targeted the single location of mass habitation in an otherwise largely empty industrial area, and plans to site a pollution generator 50 or so feet away from it. Constant and intermittent 'extreme' levels of noise, light and chemical run-off are an extraordinarily high price to pay, especially given the alternatives of Mirror Scheme H and possibly Scheme L (if modified). The state has finally begun to look at these alternatives, but I fear that in the haste to make a decision and meet the deadline, expediency will override good sense.

I urge you to listen to the many concerned voices that object to the location of the facility and storage yard in Yard 8. Help us maintain our lives and work and community; help us give Somerville a future; please encourage DOT to take up Mirror Scheme H.

I-318-002

My second point regards mitigation for the Green Line that will run along both sides of the building. Brickbotton is located at the crux of a "Y". I don't know much about mitigation techniques, but would encourage a solution – if possible – that would enable people to open their windows and not rely upon air conditioning. Perhaps sound absorbent barriers or walls would help; certainly some sort of vibration control would seem to be necessary. If additional soundproofing is needed, it would be good if your office ensured that it will be made available in an equitable manner to those who need it.

The DOT has not presented itself as an honest broker, and while it has given us many chances to speak, it appears not to listen. I urge your office to protect our rights and the quality of our lives.

Finally, a word about Brickbottom. I am a professor at MIT, and I have several colleagues from MIT and Harvard who also live in the building, including a Nobel prize winner. The majority of the building's inhabitants are artists, some well-established, some young and struggling. They are a vulnerable population, and yet essential to the hopes and culture of the Union Square side of Somerville. Despite the crisis, the area is slowly coming to life, emerging as a hip, culturally diverse center. The development is fragile, and the issues I have written about can help or destroy that future. Brickbottom is a wonderful community. Please let it survive!

Sincerely,

William Uricchio

I-318-002

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-319-001

Please see Comment Letter I-002.

HJ

January 04, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-319-001 I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner – that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

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The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a **separate** stand-alone Phase II project with no funding source identified. **This means, Route 16 may never be built.**

There are many, many problems with the Phase II approach, including:

- **Risk.** Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact.** Without a Route 16 Station, the College Avenue stop (designed and intended to be an **interim station**) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.

- **Cost.** The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state,

and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.

- **Project Management.** There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
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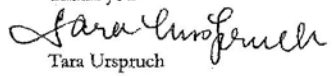
3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.



Tara Urspruch

39 Cotting Street

Medford, MA 02155

RECEIVED

JAN 8 2010

MEPA

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: EEA #13886, Green Line Extension

Dear Secretary Bowles:

I am writing to comment on the DEIR/EA for the Green Line Extension, EEA # 13886.

I strongly support the Green Line Extension, specifically Alternative 2b, extending it to Route 16 with a spur to Union Square. This project will greatly benefit the communities it will serve in numerous ways including improving air quality and greatly improving transit in an underserved community.

Long promised, this project is also long overdue, but now on a tight timeline with the legal agreement to have it running by December 31, 2014. But as an initiative that is going change of the infrastructure of three cities for decades to come, it's also critical that we get it right.

MAINTENANCE FACILITY

I-320-001

Continuing to move forward with the "Yard 8" maintenance facility alterative is not getting it right. Yard 8 should be removed from consideration and instead the area around the Boston Engine Terminal (BET) facility, including, but not limited to, the "Mirror H" and "Option L" sites, should be farther studied as part of a continuing MEPA process.

As a trustee of the Brickbottom Condominium Trust and a resident of the Brickbottom Artists Building, I live in an amazing community of over 220 people. Twenty-two years ago a group of artists converted an old A&P Foods factory into a live/work space and in doing so became the first residents to move into an area where historically infrastructure has pushed people out.

The DEIR (Section 5.12.3 p 5-145, *Common Effects of the Build Alternatives*) and the earlier *Potential Impacts on Brickbottom Artist Buildings* report (Section 2.4 p.7, *Visual Environment*), discuss "Yard 8" as having historical use as a rail yard as a reason to claim a facility there will have little impact on the character of the surrounding neighborhood. While that is technically accurate, there's more to the story – infrastructure has been pushing residents and businesses out of the area for over a century, a trend it's time to reverse.

In 1816, Massachusetts General Hospital purchased the estate Joseph Barrell had built on Cobble Hill and established the McLean Asylum. From the beginning,

I-320-001

An expanded technical and environmental analysis of light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. This chapter includes real estate impacts and order-of-magnitude capital costs for each maintenance facility alternative. FEIR Section 2.3 provides a comparison summary of environmental impacts for the three maintenance facility alternatives. FEIR Section 2.4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. As a result of the evaluation, Option L was identified as the preferred maintenance facility site. However, it should be noted that even without the use of Yard 8 for the maintenance facility, the main line Green Line tracks will still be located in this area.

Design for the maintenance facility will be developed during the Project's preliminary engineering stage. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during preliminary engineering. Chapter 8 of the FEIR describes proposed mitigation measures and related monitoring after the construction phase.

Increasing rail use in the area was an issue, leading the asylum's first Superintendant, Dr. Luther V. Bell to lament, "The almost constant shriek of the steam whistle was a sound certainly not favorable to jarred nerves and morbid sensibilities. Will so much benevolent and scientific outlay (be sacrificed) to the conveniences of engineering?"[1]

By 1896 the expansion of Boston and Lowell Railroad forced the McLean Asylum out and the railroad purchased the asylum land. B&L promptly tore down 28 buildings, including the former mansion, cut down 1,500 elm and maple trees, and uprooted hundreds of fruit trees and rosebushes, totaling 2,800 trees and plants.

Hemmed in on one side by rail, next came the highways: McGrath Highway (then the Northern Artery) was completed in 1925. It divided an area that had started off as worker housing in the late nineteenth century and had been gradually transformed into a dynamic neighborhood by waves of Italian, Portuguese, and Greek immigrants. Finally, most of what remained in the Brickbottom and Inner Belt areas was cleared in the 1950s for a highway and industrial park that never materialized.

Building a rail maintenance facility and storage yard next to the only residents in the area would just be a continuation of past trends. It's time to do better, plan smarter, and humanize the neighborhood's infrastructure, not add unjust burdens to it.

ALTERNATIVES

I-320-002

While the "Mirror H" site would have the least impact on Brickbottom and on the economic development potential of the Brickbottom/Inner Belt area, "Option L" is the most promising compromise location. However, it needs to be farther studied and refined. One problem with it is that the employee parking lot appears to push the train storage closer to Brickbottom and possibly causes an increase in track curvature (and therefore noise and vibration impacts).

Additional study and design of Option L, Mirror H, and the rest of the area around the BET site should occur as part of a Supplemental EIR and must be required to include thorough economic development and land use planning. Other site variations in that general area should also considered, as should a smaller maintenance program, and a reconfiguration of the BET facility.

MITIGATION

I-320-003

Regardless of the final site of the maintenance facility and storage yard, Brickbottom sits right in between the Green Line Extension main line and Union Sq. spur. With new tracks on two sides of the building, thorough mitigation will be critical. The DEIR's mitigation discussion is insufficient: Brickbottom is identified as having severe

[1] Sources:

- Beyond the Neck: The Architecture and Development of Somerville, Massachusetts, Updated Edition, 1990, by Landscape Research of St. Paul, Minnesota;
- Somerville, Massachusetts: A Brief History, by Dee Morris and Dora St. Martin, The History Press, 2008.

I-320-002

The Green Line Extension storage and maintenance facility is a critical component of the Proposed Project, and must be constructed as part of the overall Project. Chapter 2 of the FEIR fully describes the environmental impacts of the proposed storage and maintenance facility. The facility must be constructed adjacent to the Green Line Extension to maximize operating efficiencies and be constructed within the same time frame as the Project.

I-320-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-320-003

noise and vibration impacts, but only one side of the building has been studied and no specific mitigation measures for the building have been addressed.

In addition, only 40 of Brickbottom's 155 units are listed as possibly requiring sound proofing (DEIR Section 5.7.3 p. 5-119, *Noise Mitigation*), without any indication which units those are or how they were identified. How was that number reached?

I-320-004

DEIR Table ES-4, *Project Mitigation Commitments,* lists that noise and vibration mitigation measures will not be implemented until completion of construction. This plan should be amended so that whenever possible, noise and vibration mitigation measures are put in place before construction begins, so that those measures can also mitigate the construction process itself.

I-320-005

Before proceeding to a Final EIR, or as part of a supplemental MEPA process, MassDOT should be required to enter into binding written agreements with stakeholders that define specific, quantitative mitigation goals and process for seeking redress if any of those goals are not met.

BRICKBOTTOM STATION

The EENF Certificate for the project required studying a station site that would serve the Brickbottom/Twin Cities Plaza area. However, the proposed station just south of Washington St is almost as far away from the Brickbottom Artists Building as the relocated Lechmere station will be.

Without a closer station I fear that Brickbottom will be absorbing some of the worst impacts of the extension (from both the maintenance facility and storage yards and close proximity to *both* branches of the extension), with little of the benefits. Plus the project will be under-serving not just Brickbottom/Inner Belt businesses, but also the large shopping centers at Twin Cities Plaza and the Target plaza on Somerville Ave.

I-320-006

If an additional station can not be built during this phase of the project, it is important to design the extension now so that one or more infill stations on either line can be easily added in the future.

I-320-007

The station that is proposed is awkwardly sited so that it is not actually on Washington St, but is one building just south of it and is only accessible from Joy St. I'm in favor of a station as close to Brickbottom as possible, but that just doesn't make sense: a station right at Washington St. (ideally with access from both sides of the street) would: serve as a gateway to the Brickbottom District, be easier for other East Somerville residents to access, connect better to bus routes, and be more integrated with the neighborhood.

I-320-008

The Brickbottom station is not the only one that is not as well connected to the surrounding neighborhood as it could be: the Union Sq. and Ball Sq. station designs both require riders to cross a busy street to reach them instead of providing access from both sides of the road. Plus, integration with bus lines is lacking throughout the entire extension. To help solve these issues during the next design phase and to keep working on other things that arise during engineering and construction, continuing community involvement (both formal advisory committees and informal community meetings) will be critical and should be required.

I-320-004

As described in DEIR/EA Section 3.7, construction contractors will be required to comply with state regulations and local ordinances to mitigate air quality, noise, and vibration impacts. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented.

I-320-005

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-320-006

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-320-007

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

I-320-008

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each

COMMUNITY PATH

I-320-009 It was great to see that the initial design for the Community path was done in conjunction with the design of the Green Line Extension. For the extension to have the largest impact, full design and build of the path should be incorporated into the Green Line Extension project.

I-320-010 The path itself should be directly from accessible from Brickbottom so that it serves it not only as the only residential building near that segment of the path, but also the Brickbottom Gallery and the other Open Studios and arts events held here throughout the year.

CONCLUSION

The Green Line Extension is a fantastic project and it is important to keep it moving forward so that it can meet the commitment to be up and running by the end of 2014. I understand that the project team wishes to move directly from Draft EIR to Final EIR and I would not object to that for the extension itself.

I-320-011 However, Yard 8 is completely unacceptable and specific mitigation goals need to be committed to before those aspects of the project are included in a Final EIR. Please require them to be addressed under a continuation of the MEPA process (such as a Supplemental EIR).

This project will help compensate a community that is overburdened by infrastructure. I am asking that you help make sure that those burdens are not unjustly increased on some residents in process.

Sincerely,

Heather Van Aelst

Heather Van Aelst
1 Fitchburg St. C304
Somerville, MA 02143

EEA #13886 Comments
January 8, 2010

station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-320-009

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-320-010

MassDOT is committed to completing all planning, design, and engineering work - including the identification of necessary property acquisitions - for the proposed extension of the Somerville Community Path between Lowell Street and Inner Belt Road. MassDOT is not able at this point to commit to funding the construction of the Community Path. The limits of the path were predicated on the connections to Lechmere being made through the Inner Belt area via Inner Belt Road and the proposed Urban Ring Bridge into the Lechmere area. However, the cessation of planning for the Urban Ring Project has changed the timing of this anticipated connection. MassDOT is unable to assume responsibility for designing the Urban Ring Bridge as part of the Green Line Extension Project. That being said, MassDOT is committed to working with the City of Somerville, residents and businesses in the Brickbottom and Inner Belt neighborhoods, and Community Path advocates to design the Path to create improved connectivity within the Brickbottom and Inner Belt neighborhoods and between the Community Path and the Green Line Extension.

I-320-011

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

Johnson, Holly (EEA)

From: Diolinda Vaz [ddvaz@yahoo.com]
Sent: Saturday, January 09, 2010 1:48 PM
To: Johnson, Holly S (ENV)
Subject: I support the Green Line extension to Rte 16 by 2014!

January 8, 2010

Dear Secretary Bowles,

My husband and I moved to Medford because we were excited about the proposed Green Line extension to Rte 16 in 2014. We signed a petition along with 2,000 of our neighbors supporting the plan. And now, inexplicably, the price tag has risen astronomically and the Rte 16 stop has been postponed. This disappoints us greatly. A two-phased plan is unacceptable to us and so many of our residents who have waited too long for adequate public transportation to Boston.

I-321-001 Please reconsider the 2-phased approach, and build the Rte 16 stop by 2014 instead. It makes the most sense. If we know the Rte 16 stop will be beneficial, let's do this right and build it as soon as possible. Why wait?

Sincerely,
Diolinda Vaz

113 Capen Street
Medford, MA

LATE COMMENT

1

I-321-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

January 8, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

The DEIR as currently written does not serve the best interests of the people potentially served by the extension. The findings in the report do not adequately comply with the state environmental regulations, nor with the December 2006 MEPA certificate that defined the requirements of the DEIR.

I-322-001 Our biggest concern is that the part of the extension most critical to West Medford is relegated to an uncertain future construction phase. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits. Splitting this into two projects simply makes no sense. For one thing, the College Avenue station would have to be refitted to be a terminus, which is a waste of resources.

I-322-002 Finally, we understand that the state is legally obligated to provide public transit services to Medford Hillside by 2014, and stopping the extension at College Avenue fails to meet this obligation.

We have come to accept that the Green Line will not be extended across the Mystic River, but to not go all the way to Route 16 would be a missed opportunity and a massive failure. We strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT.

Regards,

Marc Verhagen
Ann Gallager

15 Austin Road
Medford, MA

email: marc@cs.brandeis.edu

I-322-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-322-002

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

Since the release of the DEIR/EA, a few stakeholders raised concerns that the proposed College Avenue Station, serving as a terminal station for the Proposed Project, would not adequately serve the Medford Hillside neighborhood. Serving this neighborhood was identified as part of the SIP description. To address and resolve these concerns, CTPS prepared a memorandum demonstrating that the College Avenue Station location does adequately serve the walk market area for the Medford

Hillside neighborhood. This memorandum is provided in Appendix C of the FEIR.

Johnson, Holly (EEA)

From: Maggie Villiger [mvilliger@yahoo.com]
Sent: Friday, January 08, 2010 11:04 AM
To: Johnson, Holly S (ENV)
Subject: Green Line extension EEA #13886 light pollution comment

To Whom It May Concern:

As a resident of Somerville, I am very excited about the green line extension project and am greatly looking forward to the day I can take my first ride. I am very supportive of the project as a whole.

I-323-001

I wanted to draw attention to one aspect of its development I haven't heard much about -- the lighting that will be used for the station stops and along the track itself. I assume that energy efficient choices will be made. But I also greatly hope that you will go with options that limit light pollution to the bare minimum. There are great options these days that make sure light is almost exclusively directed where it needs to be, minimizing glare and trespass onto other properties or into the sky (where it isn't serving any purpose). Making sure light is focused just where it is useful enhances safety and helps save energy and preserve our dark skies. I'm sure you are up-to-date on this issue, I just wanted to make sure that light pollution is factored into your plans.

Thanks very much for all your work,
Maggie Villiger
62 Sycamore St
Somerville MA 02145

1

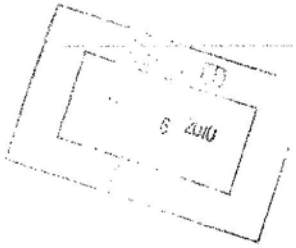
I-323-001

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. Lighting at the station stops will be designed to minimize light pollution to the extent possible. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

ITJ

To: The Executive Office of Energy and Environment Affairs, MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886 100 Cambridge Street, Suite 900 Boston, MA 02114

From: Sylvie Vincent, PhD
Brickbottom Resident, Somerville MA



Reference to the Project Number EEA #13886

Dear Secretary Bowles,

It is a very important moment for the Brickbottom community and I really appreciate the opportunity that you are giving me in expressing my opinion regarding the extension of the green line through Somerville and Medford.

I am deeply in favor of using public transportation, first because it opens the door to locations (especially downtown Boston) that are not easily accessible by cars due the traffic and parking situation and second, because I believe that any effort to reduce pollution and to avoid the use of personal vehicles is a noble goal.

I-324-001 I do recognize that the increased train cars with the green line extension will thus require a maintenance facility. However, I firmly oppose the use of the designated site "Yard 8" as a possible site for that facility. Mister Secretary, you ought to realize that we are one on the rare living building in this area. The development of this artist building 20 years ago lead to the enormous improvement of the area and the development of a new large artist building on Joy Street. The city of Somerville has dedicated money and time to clean and embellish the area. The Building cannot avoid a set down with the presence of a maintenance facility as a neighbor.

I-324-002 I have two children and I will not accept to live in an environment where noises and vibrations are an everyday commodity. Mitigation requirement for the Yard 8 site will be large and inconvenient and should concern all (and not a few) inhabitants of the Brickbottom Building. We are not going to accept deteriorated conditions of living once we know that alternative sites such as the mirror H site would fit all criteria required for the

I-324-003 project with a reduced effect on living population. The extension of the green line should go hand to hand with the extension of the biking path from the existing minuteman trail.

I hope, Mister Secretary, that a common accord will be developed in order to finalize the extension of the green line with limited damages to existing population in Somerville and Medford and limited effect on the potential development of the inner belt.

Sincerely,

Sylvie Vincent

I-324-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-324-002

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-324-003

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

Johnson, Holly (EEA)

From: Walker, Don [Donald.Walker@aecom.com]
Sent: Wednesday, January 06, 2010 7:20 PM
To: Johnson, Holly S (ENV)
Cc: vickihh@verizon.net
Subject: EEA # 13886 Green Line Extension Comments
Attachments: Greenline comment ltr.pdf

Hi Holly: Please find attached our comments on the Green Line Extension DEIR EEA #13886.

Regards,

Don Walker
Vicki Halal

11 Mason Street
Medford, MA 02155

January 6, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

We are writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

In general, we strongly support the Green Line extension and look forward to seeing its benefits in terms of reductions in traffic-related emissions as well as the improvement in access to public transportation along the corridor. We were particularly struck by the extent to which environmental justice populations will have improved access to transportation shown in Figure 4.4-1. However, in order to maximize the benefits of the project, we believe more planning work needs to be done. In particular, we offer the following comments on the DEIR:

I-325-001

1. If the legal requirements of the project include providing public transit services to "Medford Hillside" by December 31, 2014, then terminating the project at College Ave. falls short of the stipulated goal. "Medford Hillside" is generally considered to be the area northwest of Winthrop Street to Mystic Valley Parkway, and much of this area would be more than 0.5 mile from the College Avenue station. We acknowledge the funding issues associated with the "Preferred Alternative" aka the "Future Full-Build Alternative". However, if the true commitment is to extend the project to Route 16, then delaying that aspect of the project will unnecessarily add costs and construction impacts. Many of the charts in the DEIR demonstrate that the emission reduction benefits would be maximized by extending the project to Route 16. Figure 4.4-1 does not extent far enough to the north and west to show the environmental justice populations that would be served by extending the project to Route 16. With a terminus at College Avenue, more traffic is likely to be experienced on Boston Avenue between College Avenue and Route 16 due to increased drop-offs at College Avenue. For these reasons, we believe it is critical to complete the full Preferred Alternative project by the required December 31, 2014 completion date.

I-325-002

I-325-003

2. The station layout at Route 16 needs much more analysis. The alternative presented in the DEIR is a "worst case" layout that maximizes the impact on the properties at 200 and 222 Boston Avenue, and as a result maximizes the impact on tax revenue and job decreases/relocations. This layout has the effect of making the extension of the project to Route 16 seem less attractive. The advocacy group MGNA has identified an alternative that would avoid the need to take the 200 and 222 Boston Avenue properties. That alternative would seem like a good starting point to develop a more optimized layout for the Route 16 station.

I-325-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-325-002

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-325-003

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

3. As a result of the issues raised in comment nos. 1 and 2 above, we strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT.

We appreciate the opportunity to comment on the DEIR, and as we stated above, we look forward to seeing the benefits of this important project. At the same time, we believe that additional planning work is needed to make sure this project fully meets its stipulated goals and maximizes the benefits to the residents of the communities along the project corridor.

Very truly yours,



Donald E. Walker
Victoria A. Halal

11 Mason Street
Medford, MA 02155

Johnson, Holly (EEA)

From: Jay Wasserman [jayrwasdf@yahoo.com]
Sent: Friday, January 08, 2010 2:09 PM
To: Johnson, Holly S (ENV)
Subject: EEA 13886 DEIT green line extension comments
Attachments: deir_lof2.docx; 36_pdfsam_presentation 7-hi-res.pdf

Please submit these to:
Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886

I've attached a two page microsoft word document and a single page pdf.
Regards,
Jay Wasserman
34 Second Street
Cambridge, MA 02141

I think it is important to state how much I support this project. I have attended many meetings, had many discussions with neighbors, and everyone sees how much the green line extension will add to all our neighborhoods. It will connected neighborhoods that are disjoint now. This letter will outline my concerns with parts of the plan, but in no way do I think this plan should not go forward.

I-326-001 Starting with the Location of the maintenance facility, the facility should be placed in Option L. Mirror H will have a large impact on future development at Northpoint. Yard 8 has many disadvantages. The first and obvious one is the impact on the current Brickbottom development. But more importantly, it will hurt future development of the entire area. Currently the edge of East Cambridge and Inner belt Somerville are under developed. They are cut off from each other, and by building a facility at Yard 8, they will forever be cut off. Northpoint already has initial plans to connect to the inner belt, which will add value to both developments.

Option L is by far the best since it's placed in a current industrial area, and all future plans for the area are also industrial.

I have many concerns on the plans around the Lechmere T stop. I know others have sent in the plans from the East Cambridge Lechmere Working Group (which I am a member of) so I will summarize my concerns. I've attached to this email a single page pdf (which comes from the just mentioned plans) which I will reference.

In general the station is not pedestrian focused. To re-focus this, many things are needed:

I-326-002 1. Mcgrath should not be widened. A wide cross walk should be installed to allow the large amount of pedestrians going to the mall and other places around First Street.

I-326-003 2. The roads should be straightened up around the station to remove the focus from the buses to the pedestrians. The station should have a larger walk around the station.

I-326-004 3. The Charlie card stations should be covered. All the other stations in this plan have these covered.

I-326-005 4. There is no reason to have a large parking lot at the station. A few spots for the workers use is fine, but a large lot is unnecessary and counter constructive towards encouraging public transit usage. This is especially puzzling since this stop is now in the middle of the line. No other "middle of the line" stations have large parking lots associated with them....

I-326-006 5. The T should work with the glassfactory to consider swapping the end of the parking lot to allow better pedestrian access to the station from Mcgrath.

I-326-007 Finally, let me give a few words about the old station site and the triangle park. The aforementioned East Cambridge Lechmere Working Group has put together a plan for redevelopment of these sites. We've presented our ideas to many private and governmental agencies (local business groups, neighbors, representatives in Cambridge Community Development, the Cambridge city manager, EOT representatives, MBTA representatives) and all the above have had praise for our ideas.

I-326-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

I-326-002

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-326-003

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

I-326-004

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement

I-326-007

I request that the site be left alone for the near future as a plan is drawn up to develop the site. I am especially worried about rumors of a land swap with Pam Am railway over land that has no advantage for the local neighborhood.

Finally, as a homeowner who lived adjacent to a large (5 year) condo construction, I wish to discuss mitigation and noise/vibration/debris issues.

There will be issues. In the best of planning, there will be sub contractors who work outside of legal times, miscommunication over distruptive construction work, etc.

I-326-008

To address this, a properly staffed office must be opened with ownership of all the above issues. There should be a well published contract method (phone/email/office hours) to address all these issues.

This will help both sides. Often many of the issues are due to miscommunication across various responsible parties and having a single contact helps everyone.

Thank for reading my comments and I look forward to seeing this project going forward!

Regards,

Jay Wasserman

34 Second Street,

Cambridge MA 02141

jayrwasdf@yahoo.com

Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-326-005

Although Lechmere Station will no longer function as a terminal station, there is still a demonstrated demand for existing parking. Nonetheless, parking at the relocated Lechmere Station was reduced in the revised conceptual design. These revised plans are included in FEIR Chapter 5, Lechmere Station.

I-326-006

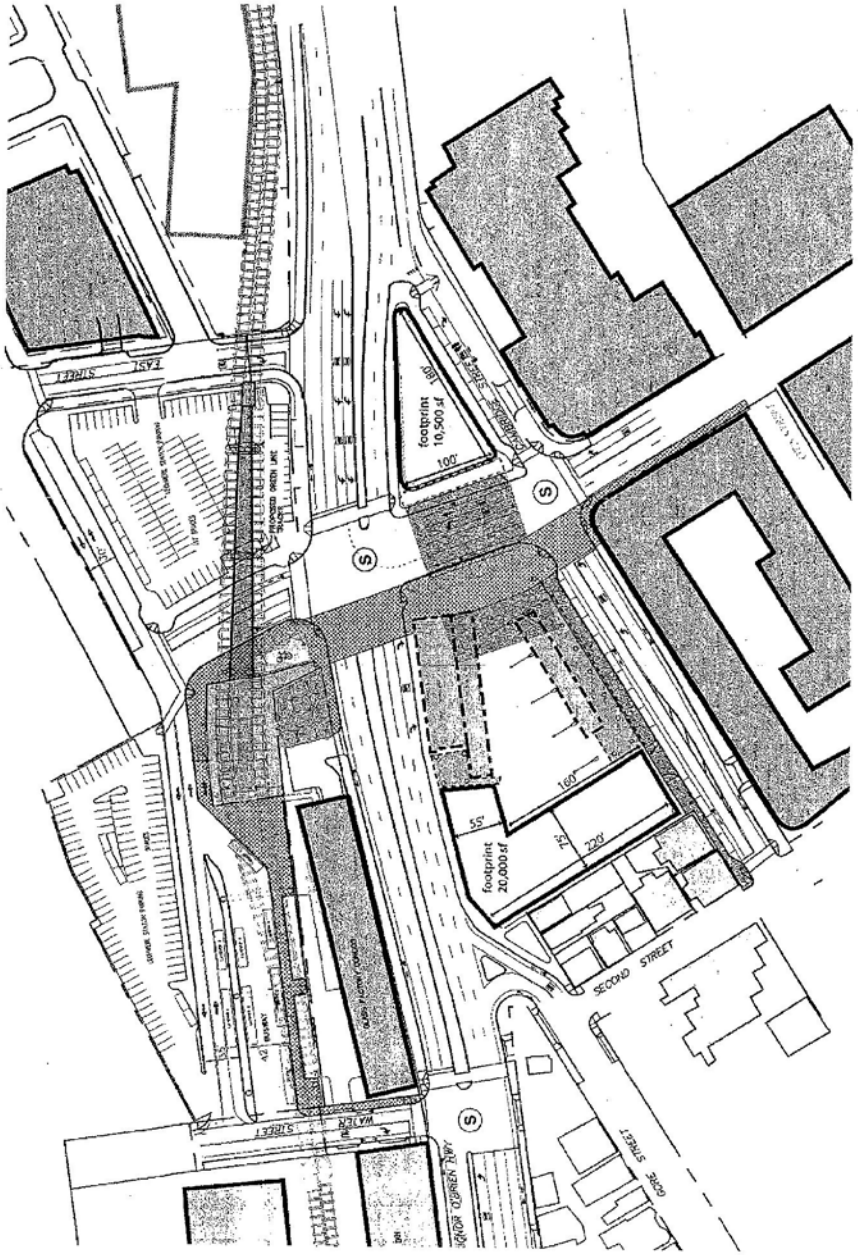
MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-326-007

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

I-326-008

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.


EAST STREET
footprint
10,500 sf
100'
180'
footprint
20,000 sf
55'
160'
75'
220'
SECOND STREET
WATER STREET
GORE STREET

Johnson, Holly (EEA)

From: Joel N. Weber II [joel@joelweber.com]
Sent: Friday, January 08, 2010 12:09 AM
To: Johnson, Holly S (ENV); Fichter, Katherine (DOT); Provost, Denise (HOU); Jehlen, Patricia (SEN)
Cc: Joel N. Weber II
Subject: Green Line Extension DEIR/EA comments

TRACK AND STREET GRADES

When I walk or drive across the Broadway bridge in Somerville, I find the sight lines caused by the height of the bridge annoying. It appears likely to me that at some point in the past, the street crossed the tracks at grade at the present level of the tracks, and that the sight lines were probably much better then than they are now.

Likewise, I have gotten the impression that the present Lowell Street bridge in Somerville is higher than the previous one, and offers poor sight lines for the streets.

I-327-001 The Green Line Extension is already planning to lower the level of the ground on the outer portions of the railroad right of way in many places, and I believe MassDOT ought to be exploring the opportunities to lower not just the outer edge of the railroad right of way, but also the center portion, in order to improve sight lines and wheelchair accessibility for the bridges. The goal should be that wheelchair accessibility for the bridges should be at least as good as wheelchair accessibility for the road in that neighborhood would be if there had never been any railroad or Green Line construction in the vicinity of each bridge.

STATIONS

Fare Gates

I-327-002 Every entrance to every station should have at least two accessible fare gates. Davis Square has only one accessible fare gate, and there was one day when I found it was out of service, blocked off by a cone; it is not acceptable for a single fare gate's failure to prevent wheelchair access to a station. (Why the MBTA didn't make a reasonable effort to accomodate the disabled by simply allowing anyone to pass through that fare gate at no charge until it could be fixed, I do not understand.)

Vehicle Access

I-327-003 I am in favor of adequate automobile pick up and drop off areas being made available at most if not all of the stations along the Green Line Extension. Because automobiles can easily travel from one station to an adjacent station, one question that should be looked at is whether there are minor stations in residential neighborhoods which should be designed to discourage motorists from using them for passenger pick up / drop off, instead of an adjacent station.

I-327-004 Stations which will be served by buses also need adequate bus pullouts. Transfers between buses and stations need to be designed to be wheelchair accessible; I am concerned that, for example, a passenger of the 88/90 buses on Highland Ave may not be able to transfer to the allegedly wheelchair accessible Gilman Square station because of the grades on the streets between the Gilman Square station and the bus stops. I also believe that the distance passengers should be expected to walk when transfering, especially in the cold of winter or heat of summer, should be kept as short as possible.

1

I-327-001

The conceptual track, system, and bridge designs presented in DEIR/EA Section 3.7 will be refined in the preliminary engineering phase of the Project. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-327-002

Revised conceptual plans for Lechmere Station, described in FEIR Chapter 5, include two accessible fare gates at this station. The number of accessible fare gates at other Project stations will be determined during preliminary engineering. The process for coordinating with local communities during Project design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-327-003

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR,

Some thought should be given to adequate parking for the MBTA's non-revenue vehicles at each station. On at least one occasion after the MBTA started running ads saying that people who use bus pullouts as passenger drop off / pick up areas can be fined, I saw an MBTA vehicle which is not used to carry reveune passengers parked in a bus stop at Porter Square, demonstrating that not enough attention has been paid to adequate parking for non-revenue vehicles at existing stations.

I-327-005 I am also strongly in favor of the MBTA striving to hire people who are within reasonable walking distance of each station to work at each station. I recognize that in general, employment law does not allow employers to discriminate on the basis of how an employee commutes to work. However, employment law does allow a trucking company to require its employees to hold an appropriate driver's license, and I believe that MBTA customer service agents who do not do the majority of their travel via MBTA services are not as able to effectively help passengers to navigate the MBTA system.

Pedestrian Bridges

I-327-006 I would like to see the DEIR/EA revised to contemplate the possibility of pedestrian bridges at three stations.

At the new Lechmere Station, such a bridge could provide a connection to the location of the old Lechmere station to mitigate the impacts of the relocation of that station, as well as potentially providing a connection to the CambridgeSide Galleria. I would like to see MassDOT explore the possibility of getting CambridgeSide Galleria to contribute toward the cost of constructing such a pedestrian bridge if CambridgeSide Galleria feels that such a bridge would increase the revenue that the stores at the Galleria collect.

At Gilman Square, a pedestrian bridge connecting the station to the sidewalk near the Somerville Library, Somerville High School, and Somerville City Hall, with the main station elevator having a level even with the ground level of those buildings, might improve wheelchair accessibility between the station and these important city buildings.

At College Avenue Station, a pedestrian bridge above Boston Avenue providing a connection to Tufts might reduce congestion on Boston Avenue and improve safety for passengers travelling to Tufts, and I would like MassDOT and Tufts to explore the question of whether Tufts alumni donations could fund such a bridge, in much the same way that universities are often able to raise funds from alumni to construct buildings.

Commuter Rail Connection

I have heard that the possibility of building commuter rail platforms at a station along the Green Line Extension has been considered, but that the width of the rail right of way at the station is a concern, and travel time for the commuter rail trains is also a concern.

I-327-007 I believe that building a station with one level for the Green Line and the other level for the Commuter Rail is a viable way to address the space issue. Porter Square, South Station, and North Station are all examples of existing MBTA stations with Commuter Rail and subway on different levels. The subway platforms at North Station demonstrate that it is possible to have one parallel track almost directly over another parallel track, where one Green Line track is above another.

I-327-008 Regarding the travel time for Commuter Rail passengers, upgrading to electrified Commuter Rail, with overhead power and/or by adapting the battery technology in the Tesla Roadster to commuter rail, ought to improve the travel time by more than enough to make up for one extra stop.

2

describes MassDOT's plans for public outreach in the next phases of the Project.

I-327-004

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-327-005

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-327-006

The DEIR/EA and FEIR (Chapter 5, Lechmere Station) include conceptual station designs. These stations are designed to be consistent with MBTA standards and compliant with ADA. Detailed designs for each station will be further developed during the Project's preliminary engineering stage. The process for coordinating with the local communities during station design is described in the Public Involvement Plan (PIP), Chapter 6 of the FEIR.

I-327-007

Opportunities for a shared station between the Green Line Extension (on the Medford Branch) and MBTA Commuter Rail were evaluated for the Project. This connection was ultimately dismissed, as described in

The study also argues that North Station already provides a connection between the Commuter Rail and the Green Line Extension. However, a passenger wanting to get from Ball Square on the Green Line Extension to Lowell Station, the outbound end of the MBTA Lowell Line, is likely to see a substantial improvement in travel time if they do not need to travel all the way to North Station as a part of their trip.

Route 16 Station

I-327-009

Route 16 Station should be designed to not preclude the possibility of transfering to / from a ferry running along the Mystic River, unless a feasibility study of such a ferry has been completed which indicates that such a ferry would not be viable.

In particular, I am thinking of a ferry that would stop at Route 16 Station in Medford on the Green Line, on the north side of the Mystic River at Medford Center, and at the new Assembly Square Station on the Orange Line, whose location should be chosen to make ferry transfers convenient. It may make additional stops between the Green Line and the Orange Line. It may also continue towards Mystic Lake. If Alewife Brook is wide enough or could be made wide enough, it might also continue to Alewife Station.

Some thought should be given to the possibility of having Route 16 Station see a train only about once every 10 minutes, having every other peak time train turn around in a third, center Green Line track just outbound of the College Avenue stop. While I do generally favor frequent service, turning some trains around near Tufts might reduce the size of the station infrastructure needed at Route 16 Station.

Washington Street / Brickbottom

The study considered four possible configurations for Washington Street / Brickbottom station(s).

I certainly support having the Green Line Extension have only one stop in that general area.

I-327-010

My understanding is that the current bridge over Washington Street is wide enough for six tracks, and it only needs to carry four tracks:
two for the Green Line Extension, and two for the Commuter Rail. (I believe there is currently also a freight track, but I believe it would be possible to reconfigure the tracks so that freight trains could operate over the two Commuter Rail tracks, without the need for a dedicated freight track over Washington Street.)

I would like to see the study address the feasibility of using the space left over that could accomodate two extra tracks as space for the platform for the Washington Street Station. What is the width of the existing bridge in feet? Could the bridge be widened further without property takings? If the bridge only carried four tracks with no platform, what is the minimum width that would be required? How much space does this leave for a platform? What is the minimum reasonable platform width to adequately accomodate waiting passengers, escalators, stairs, and elevators?

I would like to see a station designed which would have entrances/exits on both sides of Washington Street.

I would also like to see various options for adjusting the relative height of the road and tracks at Washington Street explored. Would it be feasible to raise Washington Street a bit, and lower the tracks 30-40 feet from their current height, especially if the Lowell Line was rerouted to run nearly parallel to the Green Line route south of Washington Street until it reaches the Fitchburg Line, and then follow the Fitchburg Line route past the Boston Engine Terminal to North Station, instead of crossing above Inner Belt Road?

3

DEIR/EA Section 3.3, and Appendix B. While the potential for a joint station at Union Square would need to be studied further, it is not currently part of the Proposed Project. A connection currently exists between the Green Line and Commuter Rail at North Station; this connection would remain. However, as the Project advances into preliminary engineering, opportunities for future additions and extensions of service will be considered.

I-327-008

The potential future electrification of MBTA Commuter Rail lines in the Study Area is beyond the scope of the Green Line Extension Project. However, the conceptual plans in the DEIR/EA and FEIR do not preclude future electrification of commuter rail.

I-327-009

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-327-010

The conceptual plan for the Brickbottom Station will be refined during the preliminary engineering stage, taking into consideration municipal, neighbor, and other stakeholder concerns to the extent practical. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during the station design process.

Alternatively, would raising the street and the tracks 5-10 feet improve sight lines for users of Washington Street, and would widening the open area under the bridge for Washington Street make sense?

I also believe the study needs to very explicitly explain how transfering between the 86, 91, and CT2 at Washington Street will be made wheelchair accessible.

I-327-011

Lechmere Station

Because passengers traveling between Union Square and the Medford branch will need to change trains at Lechmere to reverse direction, the station should be constructed with an island platform to save those passengers from needing to deal with multiple elevators, escalators, or staircases.

BUS ROUTES

I-327-012

When the Green Line Extension is completed, Somerville will have stops on four different rail transit lines (the Red Line, Orange Line, and the two branches of the Green Line), which do not connect to each other within Somerville. This implies that much travel within Somerville will continue to rely upon bus service.

I believe a major goal in the selection of bus routes should be for each bus route to serve as many different subway lines as possible.

The existing 86 and 91 routes do an excellent job of connecting the different subway lines, serving Sullivan Square on the Orange Line, Washington Street / Brickbottom and Union Square, on the two branches of the Green Line, and Central Square / Harvard Square on the Red Line. All that needs to be done is to ensure that these routes have convenient, wheelchair accessible transfers at the new Green Line stations.

I would like to see some thought given to the possibility of extending the western terminus of route 90 to match route 88's western terminus, adjusting the routing to provide direct transfers to the Green Line at Gilman Square, increasing the frequency of the 90 to be at least as frequent as the 88, and dropping the 88 entirely. I believe that passengers who board west of Gilman Square will prefer the option of frequent service, including weekend and late evening, to Sullivan Square over having the option of staying on the bus past Gilman Square to Lechmere when heading into downtown Boston, and I suspect that other bus routes can adequately cover the stops inbound from Gilman Square.

I would like to see some thought given to the possibility of keeping the 77's route intact outbound of Porter Square, but rerouting the inbound portion to Union Square instead of Harvard Square, or creating a new route to run in addition to the 77 which would be identical to the 77, except for the inbound end of the route past Porter going to Union Square instead of Harvard Square. It should be noted that some riders currently like to board the 1 and transfer the 77, and extending the 1 to Porter might be desireable if 77 service to Harvard is dropped entirely; also, the depth of Porter may mean that having the option of transfering between the 77 and the Red Line at Harvard may be advantageous.

I would like to see the 85 extended to connect with the main branch of the Green Line at Gilman Square and/or Lowell St, possibly with the part of the route outbound of Union Square being rerouted to accomodate this.

I also believe there would be value in splitting the 80 in half where College Ave meets Broadway, and having both halves head down College Ave to terminate at Davis Square, as the current 80 provides connections to the main branch of the Green Line Extension at both Ball Square and College Avenue, and I think that trading away a redundant second Green Line

4

I-327-011

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-327-012

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

connection in order to gain the option of connecting directly to the Red Line would be valuable.

ADDITIONAL EXTENSIONS

I-327-013

West Medford

I would like to see more exploration of options for a West Medford Green Line station.

I think MassDOT should explore the possibility of building the Green Line with two tracks from Lechmere Station to the Route 16 Station platform, and then just outbound of the platform at Route 16 Station, merge those two tracks into one, running at the same grade as the existing Commuter Rail tracks across the Mystic River on a new bridge styled similarly to the existing bridge that carries the Commuter Rail, then crossing Canal St at grade, and then from Canal Street to High Street, have the Green Line track angled downward, so that it would run under High Street, with High Street maintaining its existing grade.

Just northeast of High Street, the single track would continue for 200-300 feet under the existing Commuter Rail platform for the southwestern track, and once it gets past the large building, it would fan out into two tracks around an underground island platform.

After that underground island platform, the tracks continuing outbound might merge into a single track and continue towards the surface to approximately Newton Rd, beyond which it appears that there is a large area between Grove Street and the tracks which is currently unused, which might be a better place to put a small yard than the vicinity of the Route 16 Station.

While I recognize that the single track between West Medford Station and Route 16 Station would require operating procedures not currently used on the Green Line, I do not think this would be a problem. I believe that if trains operate on five minute headways, and the operating procedure is for an inbound train to depart West Medford immediately after each outbound train arrives at West Medford, the single tracking would not cause any significant delay vs what double tracking would offer.

I-327-014

Porter Square and Watertown

I would like to see MassDOT study the possibility of extending the Union Square branch to have a stop at Somerville's Park Street, a stop at Porter Square, a stop at Sherman Street in North Cambridge, and then follow the Watertown Branch behind the Fresh Pond shopping mall, with a stop either at Huron Ave, or where Belmont St meets Mt Auburn St, and possibly continuing from there into Watertown Square.

I-327-015

Grand Junction

I would like to see MassDOT study the possibility of constructing a third northern Green Line branch along the Grand Junction Railroad.
If space for non-revenue MBTA Commuter Rail moves is a factor, it may not be possible to construct a Green Line branch along the Grand Junction Railroad until after the North South Rail Link is constructed.

Such a branch might have a stop at Cambridge St, another stop at Main Street, perhaps with the existing Kendall Square station on the Red Line moved west a bit to facilitate transfers, possibly a stop at Massachusetts Ave, and possibly a Cambridgeport stop, possibly near Fort Washington Park. It then might cross the Charles River on a new bridge which would carry it over University Road in Boston to provide a connection by which outbound trains departing Cambridgeport could continue outbound on the B branch.

5

I-327-013

As the Project advances into preliminary engineering, further consideration will be given to the compatibility of station, track, and infrastructure design with conceptual future Green Line additions and extensions.

I-327-014

Please see response to Comment I-327-013.

I-327-015

Please see response to Comment I-327-013.

I-327-015

Additionally, it might be possible to run trains from the Medford branch of the Green Line to the Grand Junction branch of the Green Line, bypassing Lechmere, and have them continue inbound to Kenmore once they cross the Charles River.

AIR QUALITY

A major justification for the investment in the Green Line Extension is the expected air quality benefits.

Does this evaluation of air quality benefits assume that over the course of the next several decades, well over 95% of all new automobiles sold will continue to use gasoline and diesel?

When the Tesla Roadster, a lithium ion battery powered car with a range over 200 miles, first became available, it appeared that it was not economically feasible for such vehicles to replace gasoline cars, because it cost over $100,000; at that price, even if electricity were free and gasoline $4/gal, the Tesla Roadster would probably have a total cost of ownership per mile more than double the typical economy gasoline car.

However, Tesla Motors has claimed that within 5-6 years, they will begin selling a lithium ion battery powered car that will cost about $30,000. By the time the energy costs are factored in, I believe it is quite possible that if Tesla succeeds in delivering this, and prices of lithium ion battery powered cars continue to drop after that, that within 10 years, 80-95% or more of new car buyers may prefer electric cars.

I-327-016

I believe the final Green Line Extension environmental impact study should include an air quality impact comparison of the no build option vs the build option for 2030 if starting in 2020, 80% of all new automobiles sold are powered by lithium ion batteries.

I-327-017

I am concerned that the year 2030 air quality impact of continuing to run diesel locomotives on the MBTA Commuter Rail system may be far worse than the air quality impact of commuters operating lithium ion battery powered automobiles in 2030 instead of riding the Green Line Extension, especially if we start building 500 copies of Cape Wind every year in Massachusetts. The MBTA seems determined to replace approximately half the Commuter Rail locomotive fleet with new diesel locomotives within the next few years, and I assume that the plan is to pay for them with 30 year bonds, and keep them running for 30 years. I believe MassDOT and the MBTA should be prioritizing projects in order to make 2030 air quality be as good as it can be.

I-327-018

I also am under the impression that any claimed air quality improvements are based upon the assumption that after the Green Line Extension is built, the road capacity freed up by commuters migrating to the Green Line Extension will not be used by additional commuters commuting from homes that will be built after the Green Line Extension is completed. I would like the study text to explicitly comment on this, as I suspect that in practice, any road capacity freed by the Green Line Extension will eventually become used again as a result of new development.

I-327-019

TRAFFIC SIGNAL PRIORITY

Page 3-7, section 3.3.2, Maintenance Facility, of the DEIR/EA claims that capacity on the Green Line system is contrained by maintenance and layover facilities.

I would like to see the document revised to specifically address the question of whether traffic signal priority technology on the B, C, and E branches could reduce the amount of layover and maintenance facility space needed, by reducing travel times and thus reducing the number of train cars needed to carry a given number of passengers each hour.

6

I-327-016

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

I-327-017

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-327-018

Please see response to Comment I-327-016.

I-327-019

MassDOT has given some consideration to efficiencies that would be possible should the Green Line signal system be upgraded. Initial analysis indicates that an updated signal system would not reduce the vehicle storage needs at the Green Line Extension storage and maintenance facility. Further analysis on this subject is not within the scope of the FEIR.

I-327-019

I would also like to see the document revised to specifically comment on whether traffic signal priority technology could be used on the B, C, and E branches to make outbound headways on the Medford and Union Square branches more consistent.

I-327-020

FINANCIAL CONSTRAINTS

I understand that the state budget is currently constrained by a poor economy. However, I think it is important to remember that the majority of the construction will not begin immediately, and it is very possible that the economy will be stronger in years when the majority of physical construction occurs. Therefore, I think the design should leave open the possibility of choosing options that provide excellent pedestrian, wheelchair, and bus connections for stations, even if those options add additional costs that would be difficult to pay for if the majority of construction were happening in 2010.

I-327-021

COMMUTER RAIL CLEARANCE

I believe the DEIR/EA should specifically comment on whether double stack freight will be accomodated on the commuter rail tracks. I believe double stack freight operating in areas without catenary requires 21' vertical clearance, and I believe I have seen some smaller number stated somewhere as the target clearance for commuter rail tracks as part of the Green Line Extension project. I believe any commuter rail reconstruction associated with the Green Line Extension should leave adequate space for double stack freight.

Additionally, I believe that if 25 kV catenary is not installed for the Commuter Rail as part of this project, space should be left so that 25 kV catenary can be installed without interfering with clearance for double stack freight or reconstructing bridges yet again.

I believe freight clearance is typically specified as ``Plate _''
where _ is a letter, and I believe the DEIR/EA should explicity state which plate will be accomodated in all commuter rail reconstruction associated with the Green Line Extension project.

Joel N. Weber II
225 Summer St #3
Somerville MA 02143

7

I-327-020

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-327-021

Bridge clearances are limited by approach grades on crossing streets and roadway bridges. Because the community impacts would be great, the conceptual bridge designs to not provide sufficient clearance for double-stacked container freight trains. Future railroad electrification is not precluded by the Green Line Extension. Railroad clearances will be explicitly stated as Green Line Extension plans are further developed.

Secretary Ian Bowles
Executive Office of Energy & Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
JAN 8 2010
MEPA

January 5, 2010

Dear Secretary Bowles:

I am writing you regarding the Green Line Extension to Medford. My property abuts the commuter rail tracks.

I-328-001 I am not in favor of the Extension going through the Hillside neighborhood. This corridor, running parallel to Boston Avenue, from College Avenue to Winthrop Street especially, is a community of 100-year-old single-family homes, beautiful old trees, and quiet streets.

I am concerned that a second railroad would create major problems in our neighborhood:

(1) Additional noise and vibration
(2) Damage to our properties
(3) Loitering and crime
(4) Traffic congestion

The intersection of Boston Avenue and Winthrop Street is already crowded enough. The Winthrop Street bridge would need to be rebuilt to accommodate more trains running beneath it.

I-328-002 As an abutter I am very concerned that my backyard would be compromised---trees taken down, for example. My own plantings, not to mention my privacy, would be in jeopardy.

Finally, ending the Extension at Route 16 makes no sense. This is an area of industry, a small handful of residences, and a beautiful, open greenspace along the Mystic River. Putting the stop in this location will serve very few local people; it will only attract more cars that come to park or to drop off riders from other areas.

I would be very upset to see the parkland along the Mystic disturbed. This is a tranquil place now. If the Green Line comes to Route 16, sooner or later there will be litter, traffic congestion, loitering---and a beautiful place will be needlessly compromised.

It is people who live outside the neighborhood (in Arlington, West Medford, etc.) who are promoting the extension to Route 16---not the Hillside residents. I urge you to consider the people who do live along this corridor. Please do not extend the Green Line beyond College Avenue.

Thank you.

Sincerely,
Margaret Webster

15 Charnwood Road
Medford, MA 02155

I-328-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-328-002

Trees on private property that would not be acquired will not be removed. DEIR/EA Section 5.3 describes the Project's potential temporary and permanent acquisitions. MassDOT will evaluate opportunities to minimize these property impacts.

Johnson, Holly (EEA)

From: Margaret Weigel [margaretweigel@gmail.com]
Sent: Sunday, January 03, 2010 2:32 PM
To: Johnson, Holly S (ENV)
Subject: Green Line extension DEIR comments

January 3, 2010

Secretary Ian Bowles

Executive Office of Energy and Environmental Affairs

MEPA Office

Attn: Holly Johnson, MEPA Analyst

EEA #13886

100 Cambridge Street, Suite 900

Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green

Line Extension project to Medford, EEA #13886.

I-329-001

As a Medford resident, I speak for my husband and myself when I say that we both strongly support both the Route 16 terminus, and building this terminus at the same time as the rest of the project. I suspect that you will be inundated with letters outlining the reasons, so I'm going to summarize some of the salient points:

* cost. With respect to inflation alone, it will cost less to construct the Route 16 terminus along with College Ave and the other stops on the Green Line extension project. There is also the cost associated with the planning and mitigation associated with two termini. This seems like an unnecessary duplication of effort and a big waste of time and money.

I-329-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-329-002 I understand that the powers that be feel that there is not enough money in the kitty right now to accomplish this, but as a taxpayer, I ask that the smarter fiscal decision is made and that Route 16 be built in the first (and hopefully only) phase of construction. Float a loan, borrow money from other accounts… don't tell me this can't be done.

I-329-003 * quality of life. The plans that I've seen so far both assume a Route 16 terminus and a temporary College Ave terminus, but I get the sense that no one has really thought through what this would mean in terms of parking, engineering, and the quality of life for those near the temporary terminus. A College Ave terminus, however 'temporary', would entail that the trains travel past the station and turn around somehow. And what about train storage? For those who aren't thrilled with the idea of a green line in the first place, this is their worst nightmare. Better that the trains whoosh past on their way to Route 16.

* constituents served. I live near enough to the Route 16 terminus that I would walk or bike there. I can say with a great deal of confidence that it won't be worth my time or effort to make the trek to College Ave. Multiply this by the 10,000 residents near the Route 16 stop, and you've got a lot of people who can't or won't use the College Ave station. It bears noting, as well, that with the Walkling Court housing development and the new assisted living development on Capen Street in Somerville will not be served by the College Ave. station. It also bears noting that much of the population in general around the Route 16 stop are environmental justice households.

I-329-004 * legal mandate. College Ave. is not in Medford Hillside. There are several maps which state this obvious fact. That someone thinks that College Ave does meet that mandate makes me wonder which map he choose to look at.

* the "stop being sneaky" argument. Given that someone, somewhere thinks that College Ave fulfills the legal mandate to serve Medford Hillside, it's easy to assume that the Phase II to Route 16 will suddenly look elective in an era of tight budgets to that same someone. Save the trouble of us mounting a lawsuit and build the Route 16 terminus with the rest of the line.

I-329-005 * The "do your job right" argument. The design for the Route 16 terminus was a joke, and a neighborhood volunteer managed to design a station which did not involve taking the Cummings Buildings at 200 Boston Ave. I have been a reliable supporter for public infrastructure and good government development. I wonder when it will start with respect to the Green line. What does it say when an unpaid group of volunteers can do a better job with station design and advocacy? Perhaps we should 'crowdsource' this project. I do wonder whatever happened to pride in a job well done.

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

I-329-002

Project cost estimates are based on the current, conceptual level of design, and will be further refined as the Project progresses through preliminary engineering. It is anticipated that Green Line Extension construction would be financed with a combination of funds from federal and state sources. Efforts to engage a developer for the North Point development will continue as this Project moves into the next phases of design.

I-329-003

In accordance with the Secretary's Certificate on the DEIR/EA, FEIR Chapter 4, College Avenue Station, describes the ridership model assumptions and anticipated operations, traffic, environmental and access impacts at a College Avenue terminus for the Medford Branch. Mitigation measures for these impacts are described in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Commitments.

I-329-004

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

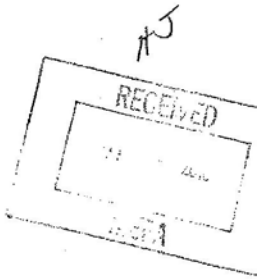
Margaret Weigel

82 Mystic Street

Medford, MA

I-329-005

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Ian Bowles,

I am a long time resident of Somerville, first living in Union Square and presently at Brickbottom, where we have resided for 22 years. I have two children, born here at Brickbottom, who have attended public schools. One is in college now. I feel that the future well being of our city and for my children's future depends on thoughtfully planned, long-term economic development. We support the positive impact the Green line extension will have in East Somerville, a poorer area of the city. East Somerville has traditionally been short-changed by poor planning, physically isolated by the McGrath highway, a very poorly designed T stop at Sullivan Station and the dumping of cars off of 93 onto Washington Street. So while our family is very happy that the Green Line will be extended past the Brickbottom area, we do not support the 24 hour maintenance facility in Yard 8.

I-330-001 I am writing specifically in response to the Draft Environment Impact Report on project number EE#13886. I am very happy that a more thorough evaluation of the alternative sites for the siting of the Green Line maintenance facility and train storage yard been considered. But I was disappointed that in the face of almost universal community opposition plus strong opposition from all city administrators, Yard 8 is still deemed the recommended place for the maintenance facility.

I-330-002 My first consideration is the negative impact this facility will have on the economic development in the area. A maintenance facility in Yard 8 will be a barrier between Brickbottom and the Inner Belt neighborhood. This will negatively impact future development and tax revenue in a city that

I-330-003 sorely needs to increase its tax base and expand affordable housing. The second is the negative impact on the quality of life to the residents living in the vicinity. I would like to see a more detailed cost analysis of the noise and vibration mitigation costs for both the construction period and permanent phases of the project. Only 40 out of 155 units at BB are designated for soundproofing. This seems unrealistic. The Brickbottom children have already had to contend with inadequate side walks, noise, dirt, and smells from the nearby trash facility, as well as no snow clearance to walk to the Lechmere T station.

The Yard 8 site will only increase the noise and impede neighborhood development. Who will want to live or build housing in an area with a 24 hour maintenance facility in their backyard? I support the Green Line extension but feel the train storage yard and maintenance facility put an unfair burden to the families in our area.

I hope you will continue to explore alternative sites.

Sincerely
Debra Weisberg
Debra Weisberg

I-330-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-330-002

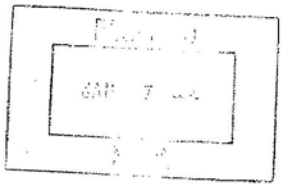
Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-330-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

January 7, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson (holly.s.johnson@state.ma.us)
100 Cambridge Street, Suite 900
Boston, MA 02114



RE: Green Line Extension Draft EIR (EEA #13886)

Dear Secretary Bowles:

First of all a happy 2010! I am writing today as a resident and energy economist with climate change focus in Massachusetts, and in that role to express my strong support of the construction of the Green Line Extension to Route 16 on the Medford/Somerville line and to Union Square in Somerville and in particular the associated extension of the Community Path into downtown Boston. I believe its positive environmental impacts greatly exceed the potential negative impacts and that it will be unnecessarily costly if not impossible for MA to achieve its self-imposed GHG reduction obligations under the MA GWSA without this kind of project. However, I cannot support the Draft EIR because of various shortcomings and omissions in the design.

Thanks you very much for considering these comments.

- I am a frequent user of the Community bike path west-bound, mostly for recreational purposes. I believe the path is one of the more valuable assets in Eastern Massachusetts for recreational purposes such as walking, biking and running. It is clear that were the path connected to Boston, the population that would gain access to the path would increase very substantially. Not only would this have positive effects on the health and happiness of many MA residents, it would also likely lower energy consumption and consequently GHG emissions, as current users of the path without direct access (e.g. say Boston residents driving to Arlington to bike on the path).
- I am also (trying to) commute by bicycle and by doing so expose myself to mortal danger on Massachusetts Avenue every day. It is clear that an extended bike path into Boston would minimize the risk of accident and thereby create a true and very low emissions alternative commuting option for residents in the catch basin of the Community Path working in Boston. I would think that the potential positive impacts of this from a variety of perspectives would be significant.

I-331-001

It seems me that as MA is trying to determine how it will lower its GHG emissions by at least 80% by 2050 under the GWSA, but also as it tries to create the types of vibrant communities that attract the business offering the jobs of this century, projects like an extension of the Community Path are among the lowest hanging fruit out there. I therefore would like to strongly encourage you to aggressively pursue the build-out of the Community Path not just within Somerville, but quickly into downtown Boston. The effect of GHG gas emissions is cumulative, so early action has high pay-offs. Early action also provides MA with more flexibility down the road and would convince residents like me that there is a commitment to action that goes along with a legal

I-331-001

The Project's Purpose and Need is described in DEIR/EA Chapter 2, Purpose and Need. The Project is needed to comply with the State Implementation Plan (SIP), which includes requirements for this Project as well as other transit projects to meet the air quality and transit commitments established as a result of the Central Artery/Tunnel project.

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able at this point to commit to funding the construction of the Community Path.

commitment in principal (the very discussion of whether or not to go ahead with a Green Line extension even though a legal commitment was made many years ago in itself is not reassuring).

Thank you very much.

Sincerely,

Jurgen Weiss
22 Burnside Avenue
Somerville, MA 02144
jurgenweiss64@yahoo.com

Johnson, Holly (EEA)

From: lynne@weissirwin.org.
Sent: Friday, January 08, 2010 11:53 AM
To: Johnson, Holly S (ENV)
Cc: Carl Sciortino; Pat Jehlen
Subject: Green Line Extension Comment

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

As a resident of Medford Hillside and regular MBTA commuter, I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I have lived in Medford Hillside for about five and a half years. I work in Back Bay, so I strongly support the Green Line extension, partly because extending the Green Line into Medford will provide a one-seat ride to work. Furthermore, a Green Line extension would increase my use of public transportation to travel in and out of Boston in the evenings and on weekends, when I often attend theater and cultural events. Late night bus service from the Red and Green Lines now is so infrequent that I often choose to drive so that my trip home doesn't take an hour and a half.

I am dismayed, however, over the plan to create a temporary terminus at College Avenue. While I can meet my own transportation needs at either College Ave. or Rt. 16, I feel the impact on the community would be far more positive if the terminus is placed at Rt. 16.

A terminus station at Route 16 will serve more residents of Medford and parts of Somerville. The Route 16 location would not only provide parking space, it would give people in the community access, via convenient transportation, to a number of businesses and services, including the Whole Foods Supermarket and the Workout World Fitness Center. Even the DEIR concludes that the Route 16 station would provide the most benefits according to all project criteria.

Placing the terminus at College Avenue, in contrast, will lead to congestion, pollution, and safety issues by increasing the amount of pedestrian and vehicle traffic at a complex and crowded intersection. Furthermore, a two-phase approach will increase costs and increase the risk the project will never be completed as intended. By MassDOT's own estimates, the two-phase approach will increase the cost of the project by $55 million over a single-phase approach.

I-332-001 Please insist the the Green Line Extension project be carried out as a single-phase project, with a terminus station at Route 16 and Boston Avenues.

Thank you.
Lynne Weiss

1

I-332-001

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

Johnson, Holly (EEA)

From: Adam Whelan [adamwhelan4@yahoo.com]
Sent: Thursday, November 19, 2009 11:28 AM
To: Johnson, Holly S (ENV)
Subject: Green Line Extension Comments/Concerns

Hello,
This email is to express my concerns along with the other occupants at the Powderhouse Condos at 616-622 Boston avenue in Medford. This DEIR can't be the final draft, it is too inadequate. I am asking by law that the MEPA process continue until a acceptable final draft with further analysis has been completed. The comments/concerns will be broken into a list below.

I-333-001 1. There are no proposed sound barriers at the Powerhouse complex. I can see one is to be setup on the other side of the tracks, how can only one side get this treatment? There trains will literally 20 feet our less outside our back door and having no sound barrier in place on our side of the track is unacceptable! I am not sure how the surveyors would overlooked this complex.

I-333-002 2. The traffic at the Boston Ave/Harvard Street and Boston Ave/Broadway Street intersections is bad enough as it is, therefore no parking should be built and allowed at the ball square station nor any other interior station. The current conditions can't take anymore traffic and the whole purpose of this project is to get the communities surrounding these stops to use public transportation, not to have people towns away drive into our communities and make it more congested than it already is.

I-333-003 3. I agree with everyone else when the maintenance facility does not belong at Yard 8 in brick bottom. The state needs to look at other alternatives more seriously, which is just one reason why this draft is incomplete! We all know the state wants to use this area because it's cheap for them and less work in the end. I think the state needs to do something right for once and we do only get one shot at this. No one wants to look back in 20 years and have everyone say I told you say since you don't seem to be listening to the community on this matter as it is.

Thank You,
Adam Whelan

620 Boston Avenue STE. 5A
Medford, MA 02155
508-364-2118

1

I-333-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

I-333-002

The Project is intended, in part, to relieve traffic congestion, as described in DEIR/EA Chapter 2, Purpose and Need. Some station access points for passenger drop-off/pick-up are likely to impact local traffic flow, as outlined in DEIR/EA Section 5.5, Traffic. As described in DEIR/EA Chapter 6, these impacts will be minimized to the extent practical. However, with the exception of relocated Lechmere Station, no parking is provided at any of the new Green Line Extension stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes how MassDOT will coordinate with municipalities and stakeholders to address traffic and parking concerns. Additionally, FEIR Chapter 4 summarizes the impacts of College Avenue as a terminal station.

I-333-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: Kevin White [Kevin@netagesolutions.com]
Sent: Monday, January 04, 2010 4:28 PM
To: Holly.S.Johnson@state.ma.us
Subject: Green Line Extension Comment

Dear Mr. Bowles and Ms. Johnson:

I am advocate of the Green Line project and, having grown up in the Davis Sq area in the 70's and 80's realize the potential it would bring. However, I would like to voice my concern regarding the solutions being offered to mitigate noise in my neighborhood. I own my home at 133 Bowdoin Street in South Medford, approximately 100 yards from the current rail line near the Tufts Science & Technology Center on Colby St. According to the Noise Impact Assessment and Mitigation Details presentation, this area's existing and future noise level will be the highest of the entire extension project. Despite this, there are no current plans to provide noise mitigation for this area; only the Tufts building will receive mitigation in the form of sound insulation for their specific building. When I asked the mitigation expert at a recent Green Line meeting about this, he explained the process by which the levels are measured and how their modeling process determines the impact of the surrounding area. According to this process, since our homes are outside the modeling area (<100 feet I believe), this area does not meet the need for mitigation.

I-334-001

Certainly I don't know enough about the federal guidelines or the modeling calculations to know if my neighborhood technically qualifies for the noise barriers being installed elsewhere, but I can tell you that this area will be greatly impacted by the increased proximity and more importantly, increased frequency of trains through our neighborhood. As it stands today, when the windows of my home are open you cannot carry on a conversation in my living room while the train is coming by. This is not hyperbole. In fact, I would welcome any visitors to my home who would like to experience this first hand. While we understood the train noise to be part of the "charm" of the area when we bought the house, the increased noise pollution brought by the additional trains would alter the balance and diminish the entire neighborhood.

My offer to witness this first hand is a genuine one. **I strongly urge the EOT to reconsider this area for noise mitigation and look forward to your response as to next steps.**

Thank you,

Kevin White
133 Bowdoin St
Medford Ma 02155
Cell: 781-413-1077

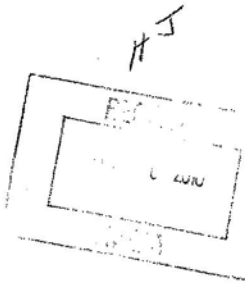
Kevin White, Director of Client Relations
NetAge Solutions, Inc.
405 Talcott Ave, Watertown, MA 02472
t: 617.393.2378
e: kevin@netagesolutions.com
w: www.netagesolutions.com

Join the Dynamo™ User Group on LinkedIn

I-334-001

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Where appropriate, MassDOT intends to implement these measures prior to construction. FEIR Chapter 8 describes the process by which mitigation measures will be identified and implemented. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

FTA defines potential noise impact based on the increase in future noise levels due to the Project, not an absolute level. Potential noise impact generally only extends to receptors within 100 feet of the east side of the alignment due to the relocation of the commuter lines and the introduction of the Green Line trains. At further distances, such as at 133 Bowdoin Street in Medford, MA (approximately 300 feet from the alignment), the relocation of the commuter tracks and introduction of the Green Line trains would not increase future noise levels significantly and there would not be impact.



Carla Wilbur
One Fitchburg Street, unit C407
Somerville, MA 02143

The Executive Office of Energy & Environmental Affairs, MEPA Office
Attention: Ms. Holly Johnson, MEPA Analyst
100 Cambridge Street 900
Boston, MA 02114

January 4, 2010

Reference EEA# 13886

Dear Secretary Bowles,

Enclosed is a copy of a previous letter I wrote to Secretary Aloisi and copied to you in June of 2009.

I-335-001

I do not have much to add except that it was good to learn of Option L during the pubic meeting in Cambridge last month. I urge you to take seriously the protesting voices from every quarter and investigate, with the same gusto applied to Yard 8, both Mirror H and Option L.

The idea of siting the maintenance facility so it abuts an established residential building when there are alternatives makes very little sense and I doubt it will prove cost effective over time.

I would also ask, "Where are regular people going to be able to afford to live ...to develop products and services and grow ideas and businesses ...to adapt to a changed economy that experts were unable to see coming or plan for?"

Have you noticed, those aspirational commercial and residential condos in North Point remain rather lonely while Brickbottom remains vibrant and Joy Street still contains businesses.

If you redefine this area as maintenance facility, you are removing the last vast swath of potential affordable live work space in the Boston, Somerville, Cambridge area. Stimulus programs go only so far, we need small businesses to resurrect our economy and how can we have that if space is unaffordable even if one can get a loan.

Sincerely,

Carla Wilbur

Carla Wilbur

I-335-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, Option L is identified as the preferred maintenance facility site.

Carla Wilbur
1 Fitchburg Street, unit C407
Somerville, MA 02143

Secretary James Aloisi
The Executive office of Transportation
10 Park Plaza, Suite 3170
Boston, MA 02116

June 4, 2009

Dear Mr. Aloisi,

As a Brickbottom resident, I have been looking forward to the extension of the Green Line into Union Square and the possibilities it would bring for economic renewal in the general area. I am sure you know that this neighborhood has had less public transportation that it did at the turn of the century due to concessions it made for public roads projects. The absence of easy public transportation has diminished the area's economic potential for years. Now, there is possibility again due to the Green Line Extension and The Inner Belt's designation as a "growth district." Please don't condemn the area to economic wasteland by introducing 'Yard 8' into the development scheme. Please consider Mirror H as the better location.

I-335-002

Yard 8 has been designated a "growth area" and is already permitted for small to medium sized businesses. If the Green Line Maintenance Facility were to be sited there, it would overcome this potential. What was promised with the Green Line Extension would be taken away with the maintenance facility. The Mirror H location is not spoken for in this way.

The Mirror H location lies between The Boston Engine Terminal and the proposed parking garages at Northpoint. This area has not been designated a "growth area." A maintenance facility here is more congruent with both existing uses and proposed.

The Mirror H location has inherent advantages for traffic flow between Northpoint, Inner Belt and The McGrath Highway that Yard 8 does not. Yard 8 is situated in such a way that creating this type of connectivity could only be accomplished by contortion. Topographically, yard 8 is elevated and geographically, it segregates Inner Belt from the Mc Grath highway area. I have heard talk of tunnels and overpasses but this sounds expensive to me.

Mirror H presents the possibility of submerging the maintenance facility beneath ground- thereby leaving more land available for future development AND incorporating the facility into the foundation of Northpoint parking garages- long term thinking and an efficient use of resources.

Apart from the fact I live at Brickbottom, the choice seems clear.

And this brings me to my final point... locating the maintenance facility in Yard 8 so that it literally abuts Brickbottom, an established residential community, is going to involve still other significant mitigation expenses that Mirror H would not.

Sincerely,
Carla Wilbur

I-335-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

Johnson, Holly (EEA)

From: alisawolf@aol.com
Sent: Wednesday, December 30, 2009 2:51 PM
To: Johnson, Holly S (ENV)
Subject: Comment on the Draft Environmental Impact Report (DEIR) for the Green

ALISA WOLF
80 Harvard Avenue
Medford, MA 02155
781-483-3908
alisawolf@aol.com

December 30, 2009

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I understand that the overriding question being asked by the Environmental Affairs secretary during this crucial comment period is whether the DEIR "adequately and properly" complies with the requirements of the environmental review process, per its guidelines.

As part of the Medford Green Line Neighborhood Alliance (MGNA), I believe it DOES NOT, and that if this crucial environmental document is accepted as submitted, it will give the go-ahead to a project that fails to fulfill the Commonwealth's legal obligations, shortchanges the community, and provides no assurances that the project will ever be fully built.

MGNA members have spent hundreds of hours conducting a detailed review of the 6,060-page DEIR and conclude that it is significantly flawed in certain assumptions, analyses, and recommendations.

As a member of MGNA, I agree with the DEIR's conclusion that the project will provide tremendous benefits to the area – improving corridor mobility and air quality, equitably distributing public transit services, and supporting opportunities for smart growth and sustainable development.

I-336-001 But these benefits will not be fully realized – nor will the state fulfill its legal obligation to provide service to the Medford Hillside neighborhood – by the project as proposed in the DEIR, which only commits to extending

I-336-001

As directed by the Secretary's Certificate on the DEIR/EA, the FEIR includes a limited scope of issues related to the Green Line Extension Project. The Proposed Project, with a Medford Branch terminus at College Avenue (and in conjunction with other programmed transit project commitments), was determined by MassDEP to be consistent with and to meet the emission reduction requirements under 310 CMR 7.36 (8), "Determination of Air Quality Emission Reductions." These requirements are also part of the State Implementation Plan (SIP; MassDEP DEIR/EA comment letter, January 8, 2010). Although an extension to Mystic Valley Parkway/Route 16 is MassDOT's Preferred Alternative, financial constraints prohibit the Commonwealth from progressing the Project beyond College Avenue at this time.

I-336-002

the Green Line as far as College Avenue. **I believe that the DEIR has an obligation to revisit the Route 16 station design and explore alternatives,** including the MGNA's proposed station design, which:

- Prevents two major commercial property acquisitions and the resulting job displacement
- Preserves $182,000/year in property taxes for the City of Medford
- Optimizes traffic flow and better serves the integrity of the station's surroundings

A $1 billion project deserves a higher caliber design process than I believe it's been given by the DEIR.

As a member of MGNA, I feel strongly that the Secretary of Environmental Affairs should NOT accept the Draft Environmental Impact Report as a Final EIR, as Mass DOT is requesting.

Rather, the secretary should require Mass DOT to continue and correct the Environmental Impact analysis, including an evaluation of MGNA's alternative design for the Route 16 station, or a similar one, that would preserve two major office buildings on Boston Avenue, lower the project cost, maximize its benefits, and fulfill the Commonwealth's legal commitment to bring service to the Medford Hillside area by December 31, 2014.

Along with other Medford citizens, I strongly urge you to reject the DEIR in its current form and instruct Mass DOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Thank you.

Alisa Wolf

I-336-002

A station at Mystic Valley Parkway/Route 16 and associated alignment improvements northwest of the College Avenue Station terminus are not included in the Proposed Project. At such time that the extension beyond College Avenue can be advanced, MassDOT will re-evaluate the proposed station layout at Mystic Valley Parkway/Route 16. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

received via email 1/7/10 HJ



The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

2010

January 6, 2009

Dear Secretary Ian Bowles:

I-337-001 Thank you for your hard work and dedication to the Green Line Extension Project. This initiative will increase the quality of life for our community and stimulate economic development. In order to fully realize the tireless efforts of your department and countless individuals, I encourage you to oppose the placement of the DOT Maintenance and Storage Facilities in the Somerville Yard 8. The alternate locations (Mirror H and Option L) are not only promising but deserve more attention and design. I also encourage you to explore additional locations. I am thankful for the opportunity to comment on the DEIR report as it did not establish effective and comprehensive mitigations and should be modified with input from the community.

I rent my apartment at the Brickbottom Artist Community and have been asked why I am so involved in the future of a building in which I have no long term economic interest. The reasoning is simple; I am cared for and inspired by my neighbors and feel compelled to support them in return. The residents of Brickbottom are artists, founders of companies, architects, parents, writers, scientists, government officials, philanthropists, cooks, great neighbors and musicians. I consider this community to be a regional treasure and feel very lucky to have the opportunity to live here. The current proposal to place a maintenance facility and storage yard next to this building will have lasting impacts for years to come and permanently cloud the advancements of the green line extension.

Please consider the following points:

Opposition of the use of Yard 8 for a Storage and/or Maintenance Facility.

I-337-002
- There are severe and potentially crippling implications for the City of Somerville if the Yard 8 land is used for a heavy maintenance facility and storage yard. It would eliminate the future development of 11.5 acres of land. This land is less than 2 miles from downtown Boston, countless attractions and businesses, and 1.0 mile from Kendall Square and technology jobs.
- The use of this land would put a permanent barrier to the Inner Belt and result in significant loss of future revenue for the city and state.
- It is entirely possible to decouple the Green Line Extension (which I fully support) from the plans to site the Maintenance facility.

I-337-003
- Although the current proposal reduces the likelihood of land takings, I urge you to minimize and reduce the need for land takings in future designs or design revisions.
- Brickbottom Artist Community: There are 220 residents in 150 residential/work units in three repurposed buildings. The community is extremely active politically and hosts numerous events including one of the longest running Open Studios.

I-337-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-337-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

I-337-003

DEIR/EA Section 5.2 describes the Project's potential acquisitions. MassDOT is currently conducting detailed property surveys to obtain more specific data. MassDOT will continue to evaluate opportunities to minimize these property impacts.

I-337-004

Mitigation: A maintenance facility would have a detrimental impact to the dwellings and residents near it. The following mitigations should be considered:

- Ensure that the potential impact assessments include noise and vibration impacts added to the existing noise and vibration for the Brickbottom residents.
- Explore means to minimize noise, vibration and pollution through novel and advance technologies. Ensure the trains and rails are equipped to reduce environmental burden.

I-337-005

- If construction were to proceed, be sure that residents can voice their concerns regarding noise and vibration and effective corrective actions will be put in place.

I-337-006

- Investigate how air quality and noise will be impacted inside of the buildings as well as outside.

Community Process:

- This should only be the beginning of the comment for the DEIR. Please be sure that this draft is not mistakenly taken as being complete.

I-337-007

- Please set up a Community Advisory Committee (CAC) to oversee this process.
- Allow the advisory committee to review contracts to ensure that the mitigations identified and yet to be identified are correctly put into place.

I am confident that these points are worth consideration regardless of the placement of the maintenance facility and storage yard. It is vital to the success of this project to ensure we are not only thinking for our generation but for the future of our community. The placement of the maintenance facility and storage yard next to the Brickbottom Artists Builiding, which has grown within the fabric of our community would be a mistake; a mistake that is avoidable. Therefore, I implore you to consider the hopeful alternatives.

Sincerely,

Kimberly Wolfram

I-337-004

As described in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts above regulatory thresholds to sensitive receptors. Chapter 5, Lechmere Station, and Chapter 8, Mitigation of the FEIR describe the process that MassDOT and the MBTA will follow during preliminary design to refine the mitigation measures, and the steps that will be taken following construction to monitor impacts.

I-337-005

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

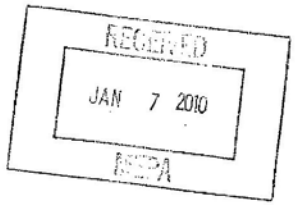
I-337-006

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. As required by the Secretary's Certificate on the DEIR/EA, the FEIR includes a narrative clarifying the relationships of air quality modeling data to MassDEP and EPA requirements for State Implementation Plan (SIP) consistency.

I-337-007

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

Dr. William Wood
25 Bussell Road
Medford, Mass. 02155
781-391-8424



December 28, 2009

Secretary Ian Bowles
Executive Office of Energy
and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA number #13886
100 Cambridge Street
Suite 900
Boston, Mass. 02114

Dear Secretary Bowles and Ms. Johnson:

" It's one thing to think you're on the right path, but it is another to think that yours is the only path."
Paulo Coelho, Brazilian writer and philosopher

Let me introduce myself. I am Dr. William Wood and I sit as an EOT Advisory committee member from Medford on the proposed Green Line extension project. I am the only self-identified disability member on the committee.

I-338-001
I-338-002
I-338-003

This letter constitutes my public comments on the DEIR report, EEA number #13886, submitted by EOT to MEPA. Let me state in this public comment letter that at this point and time in the process public comments on this project are not listened to (i.e. financing, use of land or the need for more studies on the human condition). We, the public and Advisory Committee members, need more information across the spectrum on this proposed project. And we need this information gathered and presented in a Final Environmental Impact Report. I still do not believe that EOT has followed good practice in meeting with the general public. Four o'clock meetings were impossible for working people to participate in.

The multitude of meetings EOT claimed they had I cannot comment upon. I can, though, comment upon EOT Advisory Committee meetings and other meetings EOT held in which I was present. I was not invited to certain meetings. I have questioned in public the lack of transparency of these meetings. I have provided written proof of the partiality that EOT demonstrated in this process to certain

I-338-001

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-338-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-338-003

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

groups. This evidence is in a complaint to the Federal Transportation Administration Civil Rights division, case number #09-0350.

I-338-004

The first conception of the government in dealing with the public on this project was a misconception in dealing with the disability community. I believe that the government of the Commonwealth of Massachusetts has not learned from its experiences in the past. I have protested the fact that MEPA would not take verbal comments for public record at its November 18th hearing. But they informed us only at the meeting that may be taking verbal comments. This verbal comment issue may have kept some people away. This means that those in the disability community with writing impairments are not being treated equally to the non-disability community who can write.

Although I have protested this situation in writing, I have not been informed that this situation has been corrected even though Mr. Donald Gomes, the affirmative action officer for the environmental offices, has been informed of this problem. I believe this process has demonstrated a pattern to deny citizen participation for the disability community and those in the environmental justice populations whose preferred form of communication may be verbal. This again shows a preference to provide a privileged partnership with organizations such as STEP and MGNA while leaving out groups of people whom this project is suppose to benefit. This would include Brick Bottom. This inherent pattern of discrimination within the Green Line process is why myself and another GLAM member, who is experienced in civil rights laws and meeting participation techniques, have filed a complaint with the FTA. We have asked that they investigate the fact that people with disabilities have been preyed upon by supporters of the Green Line extension to the point of violence.

Past experiences with the Commonwealth regarding a lack of participation also represents projects such as the West End of Boston whereby multiply families in an all ready integrated neighborhood were completely eradicated. Mr. Jim Campano, the curator of the West End Museum and a former resident of the West End, has stated he sees a parallel between the West End project and the Route 16/MVP project. Not only is the Alternative that includes Route 16/MVP going to take tax dollars away from the City of Medford, it is going to replace this loss with nothing. EOT states it is our responsibility, meaning the City of Medford, to replace business loss, develop land and to stop parking and traffic problems coming in to our city as result of the proposed Green Line that helps Somerville's ridership and create urban sprawl.

After reading the DEIR report EOT would have the public believe that the City of Medford has all the money in the world. You would have to believe that Tufts University is turning over its endowment to the City of Medford to correct the situation that is only going to benefit Tufts University regarding this project.

I-338-005

Route 16/MVP should never be a terminus for this project at any time in the near

I-338-004

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-338-005

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-338-005 | or distance future unless future studies are done that show improvement in the local area air quality.

Route 16/MVP would change the whole complexity of an urban area of environmental justice community and people with disabilities. This project will become a developer's dream, encouraging development for expanding Tufts University while providing nothing for the community of Medford. The Mayor of Somerville stated he would like to put a project like the area called Wellington at Route 16/MVP. This shows his lack of knowledge of Medford.

The past also includes The Kendall Square university expansion project, which has been hailed recently as a new home for technologically centered individuals. I sat on the Kendall Square Task Force. As one who practices political ethnographic inquiry, I have been schooled by people such as Mr. Jim Morse, a person with a disability, and others, like Mr. Campano, about the psychological impact of development and the scars and trauma it leaves on groups of people it affects. Not for those who moved to and currently live in areas such as Kendall Square or the West End or moved there soon after development. Not for those who make money on development projects that suits university expansion. But for those who are forced to sell their homes because taxes get too high or the neighborhood demographic changes and performs behavior modifications upon a community that excludes the long-term resident community. This impact includes increased rent and home prices above the financial capability of the average environmental justice and disability populations. Has this been identified in the EOT meetings as a social economic problem that the state must endure? Or identified as what the state must help resolve prior to the development of this project? The answer is yes, but not reported. This impact includes the HUD housing program in Medford called Walkling Court and its need for better air quality and health studies on diesel impact and so on.

Does the abstract theory, upon which almost the entire proposed Green Line project is based, have empirical facts that back it up? The answer to that question is in limbo since the empirical facts must show that the social impacts I described above do not happen. But the fact is that these impacts do occur. The fact is that the West End displacement happened in Boston and that the Kendall Square displacement project happened in Cambridge as part of university expansionism. It was recently documented that newer development at Porter Square changed the entire complexity of both Davis Square and Porter Square. When did the government get into developing transportation to move people out of their homes? It should have been learned many years ago by the state that this is a bad habit. The state has lost population, which leads to less support for federal dollars, and has driven up the cost of living in the state.

Is there political pressure involved in the Green Line decision? It appears there is. Is it coincidental that the first Mayor to back Deval Patrick's candidacy gets everything he wants while the Mayor of Medford has to pay for it through the loss

of property tax revenue? This issue is a good question for a reporter to investigate. Are developers and political families buying up property? This is another good point that reporters should be looking into during this process. No one has mentioned these problems as a change element for the worst possible effect on West Medford.

I-338-006

Nor have they mentioned that developing property above the tax rate today will only increase taxes in the future for all the cities with an effect of moving people and being a people mover, leaving generations of psychological stain on people and their families. Can this be proven? The West End Museum in downtown Boston documents this affect and books have been written on this effect. But in reality we must plan based upon abstract, outdated measures such as carbon monoxide, which the federal EPA is evaluating to determine if health base standards need to be modified. It should be required that every three years as new facts become available they become part of the system of study and that environmental studies be required to include these new facts, such as the numerous studies being done on diesel particulates health impacts upon communities.

For two generations West Enders have kept together as a group, with a newspaper that publishes many times a year. There is a class at MIT with Mr. Jim Campano as guest lecturer on the West End development. Mr. Campano, one of the leaders of the West End neighborhood lectures on the urban village concept and how not to develop a neighborhood that creates social inequality. West Enders hold meetings and social events all the time demonstrating the strong ties that held this diverse neighborhood together. West Enders makes up a large population in the city of Medford.

Is this the legacy of West Medford? Do the people feel government has/will destroy the oldest African American community in the United States with the end result of its history being lost? The West Medford environmental justice community is not a community of dense need for rehabilitation. It is an area that is well cared for by its community. The type of development the government is proposing upon this area equates with the Native American being pushed from their land, although on a smaller scale, with broken treaties by the United States government.

My research and discussion with these populations shows a pattern of trauma from different types of government interference upon the natural and sustainable growth for the people who lived there and to the people who may or may not be here in the future. The futuristic look, though popular with the urban planner and in the eyes of the urban planner a developer's dream, has not gone away. Neither has the university/corporate expansionist program gone away despite being halted for economic reasons. This futuristic look does not include the environmental justice and disability populations in those communities. All we have to do is go to the West End and Kendall Square and see how many of

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I-338-006

Direct and indirect impacts to land use are described in DEIR/EA Section 5.2, Land Use, and FEIR Chapter 2, Maintenance Facility Alternatives Analysis. MassDOT cannot control land use by property owners along the alignment or in the vicinity of the stations, but recognizes that the presence of rail transit can impact nearby land use both adversely and beneficially. Station design in particular can motivate transit-oriented development, a Commonwealth goal for sustainable land use, which could further reduce automobile traffic congestion and improve air quality.

these populations are living there in comparison to those who lived there. Is it a scant and invisible figure when researched?

Rarely do planners plan for the environmental justice or disability populations who live within their community. In fact, we had to have the American with Disabilities Act to force, not volunteer, people to pay attention to the disability and elderly population. The Congress of the United States called this systemic discrimination. Massachusetts on the other hand calls its university development for the best interest of the community. But the question is what community? Do the number of people with disabilities at these universities mirror the general population for full participation in our society?

No one I have talked to in the beginning of the EOT Advisory Committee would admit that there was any group that did not want the proposed Greenline Extension. Now these concerns are coming out from Brick Bottom, West Medford, the Hillside and the area around Somerville at Route 16. This voicing of concerns includes businesses.

I-338-007

The public relations involving this project were tremendous. How did that public relations work? Simply over a 17-year period by not allowing the environmental justice and disability populations to authentically participate within the framework of the planning of this subject. Had the state included these groups within those planning years, every Green Line station (old and new) would have been argued about to become fully accessible to the population that I am discussing. To this day there are still stations not accessible.

If there had been true representation by these populations, there would have been groups of individuals from both the environmental justice and disability community more interested in transit. Now EOT continues to leave out these people at times by posting meetings at times they are not available.

EOT has stated through its process that every one has a computer and can get the data quickly and efficiently as the educated class in these communities. EOT balked at people coming to meetings. EOT presents meeting structures that do not fit all educational backgrounds or cultural differences. It is like saying that we all must become homogeneous. We all must look and smell like a university educated class member. This is against all human rights. Yet you will not find many human rights members willing to stand up and against their own cultural preference.

In fact, what does surprise, as I said earlier, was when EOT and advocates stated that 80%-90% agreed with the proposed Green Line Extension, which included Brick Bottom and West Medford Route 16. The state and federal government knows that is not true and never was. It was a public relations tool. There was no real help to get other groups involved out there until the Green

I-338-007

The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), and the MBTA. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement as the station designs are refined.

Line Advisory Group for Medford (GLAM) was formed and advocated for more, diverse citizen participation.

There have been many futuristic looks at societies that create homogeneous societies where everyone looks, works and acts the same. Without going into history there have been a few that tried it only to eradicate individuals. Though not claiming this is the full intent of this project, it surely has acted that way.

It takes a great deal of education to understand another social culture, or as a dear friend of mine states about the Native American Culture, to walk within another person's moccasins. This process has not been done in this project.

But we have the opportunity to prove me wrong. We have the opportunity to know that there are two phases of this project. This opportunity is unique in a project like this. One phase will be to go to College Ave and Boston Avenue. This first phase allows time to research if the first phase of the project actually has a negative impact on the environmental justice and disability community. We have the opportunity to research this social issue and apply for research grants that will prove this claim to be true or false. We have the opportunity to look at West Medford who has been denied comment and how this project will affect the community of West Medford and the lives of the people in Medford while we are building and running the Green Line.

Remember that I personally have never expressed that I did not support the Green Line to College and Boston Avenue. Yet the Medford sister group to the Somerville supporters has made this a major issue. As an educated person with a Ph.D. and a lifelong member of the disability class, I waited for studies before I made an open statement on the proposed Green Line. At this juncture with only 10% of the studies complete and based upon the effect to the community, this is not enough for me to support the DEIR as a final report. This project is a bad idea due to the social impact, the current financial stress situation and one that needs more studies on local air quality and requires a diesel particulate health impact study.

I-338-008

Somerville printed in their newspaper that I was against the environmental justice and disability community. Very untrue. Any time you dare to speak out for either the environmental justice or disability communities, what occurs in this area of development is that there is a Greek chorus stating you are trying to stop the Green Line Extension. This Greek chorus means you are trying to get a handle on the human rights issue and this may hurt their cause. And you are trying to put an identity on the development and how that development is going to affect the people who live in the community. Is this project going to substantially change the neighborhoods and the character of the neighborhoods in West Medford and at College Avenue?

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I-338-008

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

As you can see I am not discussing Somerville. Yet Somerville has greatly stated that I am against the environmental justice and disability population, even though I am a lifelong member of the disability population and have worked in Somerville to make the disability and environmental justice population more welcomed within that area. I am a lifelong member of this area. Somerville with its multiple of choices for EOT advisory members never saw fit to appoint an self identified disability member or a self identified environmental justice population member.

I participated in the War on Poverty that the Lyndon Johnson administration enacted. Working as a consultant providing advice to the Dept of Education at that time, I reviewed proposals directed toward what we now call the environmental justice population. During a later time frame, as a young man, I gave advice to the environmental justice population in the Jimmy Carter administration. I worked on disability rights in the 1970s for special education in the state of Massachusetts. Despite my work in civil rights, I was still hammered by the Somerville contingency that I was against the environmental justice population since I would not accept a view of support for this project without the support of studies and participation of the environmental justice and disability populations.

It shows you how much of a community's history is lost and how much the population who supported the Green Line do not know about their community. I integrated African American colleges in the 1960's and was severely beaten by a large group of people for doing so. The Green Line advocacy community who is so well educated to the point that it knows nothing about its own community embarrasses me. My statements can all be backed up since there are African American activists in Cambridge and disability workers I have worked with over the years who know my background.

Once I outreached to the authentic environmental justice and disability population in West Medford I found out that no maintenance center was acceptable at Route 16 by those populations. A parking facility was not supported nor other imposed changes upon their community were acceptable to that population. The Hillside area was split over Route 16 as the terminus. As a veteran with a disability who is a long time member of American Legion Post 447 in Somerville, my commander asked me to look into Union Square and Brick Bottom. These two areas seemed to be left out of citizen participation by the Greek Chorus of Green Line supporters. I found that Brick Bottom new little about the maintenance center and my Legion Post little about the Union Square proposal for the proposed Green Line. The majority of Post members do not use computers to find information.

I helped found a group called GLAM with a disabled woman. This group includes participation by the environmental justice and the disability population and was organized without the help of the state while Somerville kept these populations

out in the cold. While other organizations were supported by the state to provide public relations to promote the benefits they claim come with this project, I contacted Dr. Marlene Warner to read the original environmental proposed review. She called friends in the environmental justice community, at the EPA and universities throughout the country and they all agreed that this environmental review wasn't up to par.

In the meantime, I went to work on trying to get the state to follow the Americans with Disabilities Act (ADA) and the governor's own Executive Order Number 478. The Governor, who I had met during his campaign, at a public meeting told me to keep fighting for the disability movement. We both knew the late Supreme Court Justice Thurgood Marshall's quotes on how the disability population is segregated out of events.

I-338-009

Yet EOT has gratefully stated they did all this disability work despite the fact that Jim Morse, a deaf man, Danny Colangelo, an impaired walker, and the Clinton family, who are disability members as well as elderly, were left out of the process for lack of accessibility. All these people and many more were left out in the cold by the state government's EOT process since the EOT started out their meetings without giving the disability community the right to participate in a fashion that would be best to their cultural and accommodating way. We never saw Spanish, Haitian or any other bi-lingual material at meetings nor Braille or any other type of disability accommodation in these meetings. I was appalled by the lack of communication that EOT staff and representatives had in these meetings with the environmental justice and disability community. Is this process being challenged? Yes, at the FTA level right now in a written complaint/report. Not only is the disability community challenging the EOT process, but so also is the environmental justice population challenging this process by one of their own experts. After our complaints about this process, EOT is now starting to make this type of material available. It was not available in the beginning of the process. This was a violation of the 1964 Civil Rights Act intent.

But let me state this, there were many good state employees who gave us the information that lead to this report. These are people who were concerned about the EOT's ineffective manner toward the environmental justice and disability populations. In doing this kind of research and presenting arguments about this development transit project, we find that now there is a large population in Somerville, as I stated, who did not want a maintenance facility. And many of them do not support the proposed Green Line extension to Route 16. Some of them are veterans and disabled veterans; some are ordinary citizens and Brickbottom residents.

I am not writing about these groups specifically, but about the general public relations that seems to only apply between EOT and the educated group of individuals who use the website set up for home computers. Not everyone uses the computer. Surely the government must understand that among non-degreed

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I-338-009

Outreach efforts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

people there are adults who do not use a computer and that there are technology gaps within populations. Number one, they cannot afford it. Number two, they have not been trained. Number three, technology does not go to everyone in our society. Theses are generally accepted points that real educated persons understand.

Wasn't it a surprise to find out that when people in Somerville were offered a proposed Green Line Extension in Somerville that it was only the technologically inclined that knew about it? Was it a surprise that the first mayor to support the Governor for election was from Somerville and the State Senator who supports this transit growth was from Somerville? Is it a surprise? No. Will it be a surprise that the people in Medford will not be listened to by the state government? No. That is what Congress calls systemic discrimination. That is what has happened and what we are fighting here.

I-338-010

But what can we do to eradicate this situation? We can actually study the empirical side of the proposed Green Line Extension to Route 16. We can use empirical data from other development projects around Massachusetts and the Boston/Cambridge/Somerville to see if they do change and cause an effect that is more a social impact toward injustice to the environmental justice and disability community.

I-338-011

Phase I of this project can also allow time to see the affect of the newer standards that the federal EPA is studying to enhance the Co2 factor. We can study as to whether a particulate health study needs to be conducted beyond Route 16 to the West Medford community. We have the time and capacity to study these and other problems that have been brought out by GLAM. I am stating that the educated class and state should do better homework for the people of the environmental justice and disability populations of West Medford. This study should be conducted with the West Medford disability and environmental justice population.

I-338-012

We also have the capacity and time to look at in a fair manner the tunnel alternatives such as making the proposed Green Line extension project in a similar vein to the Reno, Nevada train project. This train project was enclosed to limit noise and to enhance environmental benefits including washing environmental particulates out of the air before they become particulates for cancer. These particulates are an impact concern for the environmental justice and disability populations from Ball Square to Route 16. What we have here is a moral obligation and an ethical consideration as well as the capacity to do it.

If we don't perform these studies, we, as a society, are losing out again to a Harvard like dominance of a community like Union Square Allston. A place that will not be developed for the best interest of the community that lives there, but to a hypothetical future that may never be seen.

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I-338-010

Impacts to environmental justice populations are described in DEIR/EA Section 5.4, Environmental Justice. Additionally, the Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes specific outreach efforts to the environmental justice community that will be made as the Project progresses through its next phases.

I-338-011

The Proposed Project terminates at College Avenue Station. The Project does not extend to West Medford, there are no impacts in West Medford, and no additional studies are warranted.

I-338-012

Tunneling alternatives were evaluated but dismissed, as described in DEIR/EA Appendix B, Section 7.

We can study to see what can help the tax burden of the cities. We can study how to keep populations or even relocate populations if necessary in a fair manner, instead of as in the past. It is my conclusion that this project has been unfair to the populations that live here. That the technologically based population has clamored to control the vast media regarding this project and to control that media through computer sciences.

Tufts University has made it clear to the population here that it does not serve that it is has it fingers or tentacles in other groups. And that those tentacles will be revved up to destroy the credibility of any one who criticizes the proposed Green Line Extension project that they consider dangerous to their futuristic plans. If the government of the United States and President Obama coming from a university background, a president that I supported, funds this project, the government is then setting in motion a human tragedy unless we understand it now. We need to correct what we can and study that which we need so we can go further to preserve the populations that live here.

This DEIR does not mitigate the cost of this transit project. Mitigation cost has not been put into the DEIR report as I read it. Land taking has always been a Medford issue. If you go to Rte 16, you will take land and tax dollars. It leads this writer to surmise that you will eventually put a project in area that will do nothing but create destruction of the oldest black community in this country that has been free and standing for many historical years. Again, you will not listen to the environmental justice population and their needs and you will not listen to the disability community and their need for studies to make sure you are not creating a disability zone for cancer, which may include West Medford and the Hillside. The state is creating a possible human rights cancer-producing zone.

As my friends in the union tell me, they haven't been talking about the Green Line as a jobs program. Hence, I cannot see it as a jobs program. So the state will not be addressing that issue. But the only issue you will be addressing is development through transportation and a possible reduction to the Tuft's budget saving them transportation costs. This project will allow the university the privilege of parking its cars in its parking lot and taking the Green Line into Tufts Medical Center in Boston, as well as, Red Sox games, symphony hall events, and visiting other universities.

I-338-013

But will there really be jobs created for the disability and environmental justice populations on either side of the Green Line in Boston or in Somerville and Medford? There is no empirical data that supports that jobs will be created for either of these populations. In fact, it was brought to EOT's attention that jobs were moving to the 128 and 495 beltways. Copies of the business newspaper articles that claimed this fact were given to EOT in other public comments. Studies requested by a state legislature were given to EOT to state this job trend to the suburbs was a fact. The action of the state between Ball Square and Rte

I-338-013

Socioeconomic impacts, including projected effects on businesses, jobs, tax revenues, and community disruptions, are described in DEIR/EA Section 5.3, Socioeconomic Impacts. Effects on land use and transit access are discussed in DEIR/EA Section 5.2, Land Use, and Section 5.15, Indirect and Cumulative Effects. As required by the Secretary's Certificate on the DEIR/EA, additional analysis of the socioeconomic effects of the maintenance facility alternatives are described in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. A series of Project workshops will provide opportunities to discuss broader impacts of the Project on job creation, economic development, housing affordability, and other community impacts.

I-338-013 16 seems to take jobs away, takes parking away, takes buildings away that have been mentioned in the EOT report.

There is no replacement for these jobs and this is just the beginning. In every project there are enhancements and missed plan conceptions that have to be corrected. This project does not address these issues and would do even more in the taking away of environmental justice and disability jobs. One of my recommendations would be to develop a fund to find jobs for displaced workers in Somerville and Medford. I also recommend a fund to keep these workers on unemployment for a longer period of time than the law requires for the purpose of helping these people resettle their lives that you, the government, are disturbing. This is not out of context. This would be called a mitigation fund.

I-338-014

These funds could be set up through developers linkage projects that pay the federal and state government. Developers would be required to pay linkage funds to the state if they develop within the first ten years after the transit project is finished. There should be a fund by Tufts University to pay for its usage and its responsibility to the communities for the disruption of linkage to its college.

Is this something out of the ordinary? Not really. Similar arguments were presented in Reno and the business community stepped up to the plate and helped with the development of that project. What the Commonwealth is saying is that the taxpayers alone should pay for this project. What Reno said was that the taxpayer should pay some, but the people who will get the most out of it should pay some also.

I-338-015 In conclusion, I support the project to College Avenue on condition that the people at Brickbottom get a full hearing on their needs and wants unlike the people of West Medford have received. I would support the Green Line to College Avenue on condition that studies are done to mitigate the impact of the proposed Green Line in Medford if those studies, as I think, show a change in the community. In that case, Route 16 should be dropped from any plan. Studies

I-338-016 should be more empirical and less based in abstract theory and not necessarily based in current federal standards but on forthcoming changes. Empirical means, will the state actually change the community as happened in other projects in Massachusetts? Will the environmental justice population get the full worth of their homes, businesses and community? Or will empirical data show that these populations will be low-balled and the second group of ownership will make a large profit off the government interfering with natural development.

I-338-017 For financial reasons I could support stopping at Ball Square because groups such as STEP and MGNA, who supported this project before studies were presented, have stated they support walk to and bike to stations as a replacement for cars. Because Ball Square is so close to College and Boston Avenues, it would only be appropriate that we save money by stopping at Ball Square so peoples such as STEP and MGNA get what they worked for, walk to

I-338-014

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-338-015

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-338-016

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-338-017

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

I-338-018 and bike to stations. I also support true community paths, not just walk and bike paths. Community paths must be accessible by the disability community. I support full participation of the disability community in the design of the stations. It should be mandated that self-identified people with disabilities are protected from MGNA and STEP, the Greek chorus of supporters. These groups have a pattern of leaving out the environmental justice and disability communities in participation.

There also are ways to build this project in Sections for financial consideration that I would support (e.g. Union Square with Lechmere station first); then when the state has more funds move the project to the next area. In the next section build the maintenance facility (wherever it will be). While building these segments, the state should do further studies on the affect of the new build around each stopping point before moving forward. Although it may cost more, we will have a better sense of this project's affect on human populations and whether it needs to move foward.

Is the government going after small businesses while allowing universities alone to harvest the benefits of this project? The government should make sure the tax base of Medford is protected from the loss of land or businesses and that the residents are protected from speculators and carpet baggers as was the case historically in the South during Reconstruction. Yes, I am saying that universities and business will take advantage of the community in these situations.

Is Tufts getting a large benefit from mitigation costs while residents and St. Clement's Church gets little or no help? This is a public relations nightmare since most people so far believe that Tufts University gets the most benefit of this project to College and Boston Avenue and will get the bulk of mitigation money while lowering their cost of transportation.

I-338-019 The fair price of housing should be based on future figures and not on the basis of today. If you are stating that the future is going to change, than you should state that the profit to be made should be made by the people who live here now because the current community is taking the blunt of the disturbance of this project as well as the trauma.

As I earlier quoted Paulo Coelho, the Brazilian writer and philosopher, there are many paths and all might be right for one group or another. Hence closing anyone's path from the beginning of this process is nothing more than a rubber stamp without truly looking at the needs of progress. Closing paths at the beginning of this process is what was done in the communities impacted by this project. These are the personal comments of Dr. Wood.

Sincerely yours,

Dr. William Wood

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I-338-018

DEIR/EA Section 3.7 describes bus, pedestrian, and bicycle access at each of the proposed stations. Sections 4.4 and 5.3 of the FEIR, Access and Circulation, describe pedestrian and traffic access for the proposed College Avenue Station and redesigned Lechmere Station, respectively. The preliminary station access and platform designs are based on requirements and guidance provided by the Americans with Disabilities Act, 1990, the Commonwealth of Massachusetts Architectural Access Board (MAAB), the MBTA, and the recent Boston Center for Independent Living (BCIL) agreement. In general, current station concepts include two elevators, escalators, and stairs, and meet the MBTA's requirements for access.

In accordance with the Secretary's Certificate on the DEIR/EA, bicycle, pedestrian, bus and automobile access at stations, as well as specific design details and station elements, will be refined during preliminary engineering. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-338-019

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
NOV 16 2009
MEPA

Dear Secretary Bowles,

I have lived in Cambridge for 30 years and in East Cambridge for one year. I am an avid cyclist and user of public transportation. I would like to express my concerns about the planned move of the Lechmere T station to the north side of McGrath/O'Brien Highway.

I-339-001 I am very concerned about the crossing where pedestrians will walk between the station and East Cambridge. This is a very busy highway, and the crossing must be well-designed, and give pedestrian convenience and safety high priority.

I-339-002 Apparently the plan is for the Charlie Card machines to be uncovered and exposed to the elements. This seems like a major oversight. Lechmere Station is an important bus and subway interchange, and people should be able to buy tickets and wait without getting rained on. In addition, my understanding is that there will not be an entrance to the station facing East Cambridge. East Cambridge residents will already have to negotiate the highway on foot. Please don't force us to walk around the back of the building in addition.

One suggestion I heard recently was to have bus routes go on Cambridge Street all the way to First Street before turning north toward the station. This plan would have several advantages:

- Riders going to East Cambridge could get off the bus on Cambridge Street before it turns north;
- Riders from East Cambridge could board the bus on Cambridge Street, avoiding having to cross the highway;
- Busses would cross straight across the highway at a light rather than having to make a left turn to get into the station;
- Riders could be allowed to board the bus for free on Cambridge Street in order to get a ride across the highway and avoid having to cross the highway on foot.

I urge you to consider this plan.

I-339-004 I have seen a proposal for the redevelopment of the existing Lechmere station buildings as a public market. I am very excited about this prospect and I urge you to consider it. There is an enormous amount of development in East Cambridge, and providing a place for environmentally-friendly food sales proximate to public transportation would be a wonderful addition to the neighborhood.

Thank you,

Alec Wysoker
131 Spring Street #1
Cambridge, MA 02141

I-339-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-339-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-339-003

Revised conceptual plans for Lechmere Station, including bus facilities and bus waiting areas, are included in FEIR Chapter 5, Lechmere Station. Bus layover has been shifted further to the east and away from the Glass Factory Condominiums in the revised Lechmere Station design. Signs will be posted to limit idling of buses, in conformance with MBTA standards.

I-339-004

MassDOT has reviewed the suggestions submitted by the East Cambridge Planning Team. Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. These plans, including the pedestrian crossings of O'Brien Highway and associated

street, crosswalk, and sidewalk designs will be further refined in the preliminary engineering stage of the Project. As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

Ellen Young
1 Fitchburg Street B256
Somerville, MA 02143
617 666-8463
ellenyoung@rcn.com

RECEIVED
JAN 8 2010
MEPA

The Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EE#13886
100 Cambridge St, Suite 900
Boston, MA 02114

Dear Secretary Bowles:

Despite the 2014 Green Line Extension deadline, the DEIR/EA has enough glaring inadequacies that I hope you will not hesitate ask MassDOT for more forward-thinking land use planning that that will be less detrimental to the Brickbottom community and to the city of Somerville.

I-340-001 I have explored the Inner Belt area on my own and toured the Riverside Maintenance facility with Kate Victor and have become comfortable with Option L as the best proposal so far. An ideal solution, though, would be to make more efficient use of the 40+ acres occupied by the Boston Engine Terminal and fit the new facility onto existing MBTA land.

I've lived and worked in a second floor north-facing Brickbottom studio since 1988, just a few yards away at eye-level and ear-level from what will soon become the main Green Line to Medford. I don't own a car and am looking forward to the convenience of the extended Green Line, although the trains will leave me with just a few hours of peace and quiet each night. If the maintenance facility is sited at Yard 8, I won't even have those few hours. Visitors to my studio are always shocked at how deafeningly loud the squealing and crashing of the freight trains outside my windows can be, but I've considered myself fortunate to live on the "quiet" side of the Bakery building, away from the more-frequent roar of the commuter trains. On those tracks we are also unfairly subjected to the grating racket of roof-top air conditioners and refrigerated freight cars. All this noise pollution is *intensely unpleasant* even to the most noise-tolerant among us. The constant, inescapable noise and vibration of trains en mass, 20 yards away walled in with sound-reflective surfaces is undoubtedly the kind of physiological and psychological stressor that could take a serious toll on anyone's health. This would be our fate with Yard 8.

In addition to noise, the commuter trains often spew enormous blue clouds of diesel exhaust. Brickbottom is constantly bathed in a rain of brake dust and exhaust particulates from the trains and from traffic on Route 28. Public transportation today should be as much about maximizing the environmental benefits as it is about moving people form point A to point B.

We are depending on you to:
I-340-002 1) not accept the Draft EIR as final,
I-340-003 2) disallow the use of Yard 8 for train storage or maintenance,
I-340-004 3) require the formation a Citizen Advisory Committee to help ensure the rights of abutters are respected,
I-340-005 4) require the MBTA to install effective mitigation features *before* construction begins,
I-340-006 5) establish a formal appeals process in the event that pre-agreed maximum levels for noise, etc. are not attained. A framework to air and redress grievances could prevent drastically more expensive litigation.

Thank you so very much for your assistance at this crucial juncture.

Sincerely,
Ellen Young
Ellen Young

I-340-001

As explained in FEIR Chapter 2, MassDOT has explored opportunities for the Green Line Extension storage and maintenance facility to share resources with the Boston Engine Terminal. The independent needs and constraints of these facilities limit opportunities for shared resources. MassDOT will coordinate with the MBTA during preliminary engineering to maximize efficient land utilization between these storage and maintenance facilities, if possible.

I-340-002

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.

I-340-003

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-340-004

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has developed a Public Involvement Plan (PIP) for the Green Line Extension Project. The PIP, Chapter 6 of the FEIR, describes MassDOT's plans for public outreach in the next phases of the Project.

I-340-005

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in

FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-340-006

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. FEIR Chapter 8 describes specific proposed mitigation measures, plans for monitoring after construction, and next steps pertaining to mitigation. The stakeholder coordination process for Project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Johnson, Holly (EEA)

From: David V. Zawacki [david@dzawacki.com]
Sent: Friday, January 08, 2010 12:45 PM
To: Johnson, Holly S (ENV)
Subject: My support for the Green Line Extension to Rt.16

Dear Secretary Bowles:

As a Medford homeowner and resident (and a former Somerville resident) for the past 6 years, I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA #13886.

I-341-001

First of all, I strongly support the Green Line extension, and urge that it be built in the most practical, beneficial and cost-effective manner - that is, to construct the entire project in one phase, with a terminus station at Mystic Valley Parkway (Route 16), by December 31, 2014.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2006 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

There are many, many problems with the Phase II approach, including:
* Risk. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
* Terminus Impact. Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
* Cost. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project

1

I-341-001

Please see responses to Letter I-002.

produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
* Project Management. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
* Environmental Justice: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
* Legal Mandate: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

2. College Avenue should not be a terminus. The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. The Route 16 station design is inadequate. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings.
MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Best Regards,

David Zawacki

David Zawacki
98 Billings Avenue
Medford, MA 02155

Johnson, Holly (EEA)

From: Stephanie Zawacki [stephanie.baldock@gmail.com]
Sent: Monday, January 11, 2010 4:58 PM
To: Johnson, Holly S (ENV)
Subject: My support for the Green Line Extension to Rt.16

Dear Secretary Bowles:

As a new Medford homeowner and resident (and a former Somerville resident, 2007-2009), I am writing to comment on the Draft Environmental Impact Report (DEIR) for the Green Line Extension project to Medford, EEA#13886.

I-342-001

First of all, **I strongly support the Green Line extension**, and urge that it be built in the most practical, beneficial and cost-effective manner -that is, to construct the entire project in one phase, **with a terminus station at Mystic Valley Parkway** (Route 16), **by December 31, 2014**.

The DEIR is encouraging in that it concludes that the Route 16 station would provide the most benefits according to all project criteria, including air quality and environmental justice. However, MassDOT states that it is incapable of building (and funding) the entire "Preferred Alternative," so it only intends to build the extension to College Avenue in the Tufts University area of Medford, by its deadline of December 31, 2014.

In my opinion, the DEIR as currently written does not serve the best interests of the project. More importantly for your review, it was not done in a way that "adequately and properly" complies with the state environmental regulations, nor with the December 1, 2005 MEPA certificate that defined the requirements of the DEIR.

For the following reasons, I strongly urge you to not accept the DEIR as the Final EIR and require further environmental analysis of the project by MassDOT:

1. A two-phased approach is unacceptable. The Route 16/Mystic Valley Parkway Station should be built as part of a single-phase project to minimize costs and negative impacts and achieve the maximum benefits with regard to ridership, vehicle mile travel reduction, air quality improvements, and service to environmental justice communities.

The recommendation as outlined in the DEIR is for the Route 16/Mystic Valley Parkway station to be a separate stand-alone Phase II project with no funding source identified. This means, Route 16 may never be built.

There are many, many problems with the Phase II approach, including:

- **Risk**. Without an identified funding source there is a very high probability that Route 16 will never be built and the implications of this are critical.
- **Terminus Impact**. Without a Route 16 Station, the College Avenue stop (designed and intended to be an interim station) would become the de facto terminus for the Green Line extension. It is not designed for a terminus and due to the traffic flow and neighborhood density, as well as the lack of opportunity for transit-oriented development at College Ave., it is not a good location for a terminus.
- **Cost**. The two-phased approach is fiscally irresponsible and by MassDOT's own estimates will inflate the cost by $55 million over a single-phase approach. Severing a single stop (less than one mile of track) from the project as a whole will cost the state, and thus the taxpayers, significant additional money. There are obvious ways to easily reduce costs in the overall project and provide enough additional funds to include Route 16 as part of a single, complete project. This is the most prudent approach, and also would ensure that the project produces the air quality improvements the Commonwealth must achieve to come into compliance with the Clean Air Act.
- **Project Management**. There are significant efficiencies gained from completing the project in one phase, rather than the starts and stops required to execute on separate, multi-stage efforts for such a small add-on project as a single station stop.
- **Environmental Justice**: The environmental justice population cited, in part, to justify the project as a whole will largely not be served if the project terminates at College Avenue. The negative aspects of this project will affect them most, while they will receive the least benefit without service to a Route 16 terminus.
- **Legal Mandate**: The state is legally obligated to provide public transit services to Medford Hillside by December 31, 2014, and stopping the extension at College Ave. fails to meet this legal obligation. At a minimum, this incurs significant mitigation costs required if the obligation is not met.

1

I-342-001

Please see responses to Letter I-002.

2. **College Avenue should not be a terminus.** The College Avenue station is not designed for the additional requirements of a terminus. The neighborhood cannot sustain the impact of a terminus station operations and traffic volume and the potential environmental damage is of serious concern.

3. **The Route 16 station design is inadequate**. The DEIR offers only a "worst case scenario" (MassDOT's description) for the Route 16 station design, while offering optimized station designs for all other Green Line extension stations. The Route 16 station design must be revisited. The Medford Green Line Neighborhood Alliance, a volunteer citizen group, has offered an alternative station design that prevents two major commercial property acquisitions and the resulting job displacement, preserves $182,000/year in property taxes for the City of Medford, optimizes traffic flow and better serves the integrity of the station's surroundings. MassDOT apparently has been exploring similar improved designs, which should be presented to the public for comment. A $1 billion project deserves a higher caliber design than a "worst case scenario."

To summarize, there is much more work to be done on the Environmental Impact report, and I strongly urge you to reject the DEIR in its current form and instruct MassDOT to perform the required further environmental analysis in order to make the Green Line extension the best project it can be, and MUST be.

Best Regards,

Stephanie Zawacki
98 Billings Avenue
Medford, MA 02155

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* Live simply. Meditate. Consume less. Think more. Get to know your neighbors. Borrow when you need to and lend when asked. *

Johnson, Holly (EEA)

From: zebrose@gmail.com on behalf of Kate Zebrose [zebrose@alum.mit.edu]
Sent: Thursday, January 07, 2010 10:14 PM
To: Johnson, Holly S (ENV)
Subject: DEIR green line Somerville
Attachments: zebrose - DEIR.pdf

Please find my written comments regarding the green line extension report attached. - Kate Zebrose

Kate Zebrose
26 Josephine Ave
Somerville, MA 02144

Secretary Ian Bowles
Executive Office of Energy and
Environmental Affairs MEPA Office
Attn: Holly Johnson
100 Cambridge Street,
Suite 900 Boston, MA 02114

RECEIVED
JAN 7 2010
MEPA

Dear Secretary Bowles:

I have read the DEIR report regarding the extension of the green line to Somerville. I am very much in favor of this extension and thought the report was well presented and helpful. However I understand there is some question regarding whether the community path development will be coordinated with the green line extension.

I-343-001

Given that the community path will need to use some of the right of way, and that the community path is bound to provide a pedestrian feeder to the green line stations, it is clear to me that these projects need to be planned together. I remember this issue being brought up at an early green line extension meeting and the response had been that these are independent proposals.

There might have been a weak argument for the position in the early stages, but at this point it should be very clear that these projects both need to be completed and that they need to be intimately coordinated. Any other approach will result in inefficient use of tax payer dollars and, at worst, bad design decisions.

I-343-002

The DEIR should clearly state that the extension of the Community Path will be designed by MassDOT's contractor as agreed in the February 24, 2009 letter from the former EOT.

Thank you for all your efforts bringing this project forward. I look forward to seeing this project progress.

Best Regards,

Kate Zebrose

I-343-001

MassDOT has committed to complete the final design of the proposed Community Path between Lowell Street and the Inner Belt area. MassDOT is not able to commit to funding the construction of the Community Path. However, MassDOT will continue to work with the City of Somerville to identify potential state and Federal funding opportunities for the construction of the Community Path.

I-343-002

Please see response to Comment I-343-001.

Johnson, Holly (EEA)

From: Jessica Zeigler [jzeigler@rcn.com]
Sent: Sunday, January 03, 2010 8:46 AM
To: holly.s.johnson@state.ma.us
Subject: Comment on green line extension

I-344-001

Good morning. My family lives on Woodbine Street in Somerville. Our backyard overlooks the train tracks. We are aleady concerned about the effects of train-related air- and noise-pollution on ourselves and our young children. These tracks see heavy traffic from freight and passenger trains, and we want to make sure that the additional train traffic will not add to these problems. We hope that there will be noise and pollution studies to demonstrate the potential impact of the additional traffic and residents' health and wellness will be insured.

Thank you.

Jessica Zeigler
5 Woodbine Street

Sent from my iPhone

I-344-001

The Green Line Extension will have a positive impact on air quality within the study area. DEIR/EA Section 5.6, Air Quality, describes the expected improvements in local and regional air quality that would result from the Proposed Project. Further explanation of air quality modeling assumptions and potential impacts are described in the FEIR Chapter 3, Air Quality. Additionally, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors.

As discussed in DEIR/EA Chapter 6 and FEIR Chapter 8, MassDOT has complied with FTA-established guidelines to identify and then eliminate, minimize, or offset noise and vibration impacts to sensitive receptors above regulatory thresholds. The stakeholder coordination process for project mitigation is described in FEIR Section 6.3, Public Outreach Strategies.

Fr · 01/08/2010 16:35 #015 P.001

January 8, 2010

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #03886
100 Cambridge St., Suite 900
Boston, MA 02114

Dear Secretary Bowles:

I-345-001 I As a resident of the Glass Factory Condominiums, I am deeply concerned about the design and placement of the Green Line Extension and the new Lechmere Station.

TRACKS ARE TOO CLOSE TO OUR BUILDING.
The present design shows the tracks running very close to the rear of our building. We urge your designers and engineers to place the tracks as far to the rear of our building as possible to preserve views & light to the many units that will be severely impacted by the elevated tracks. The design and placement of the tracks and supports should do all it can to minimize the visual impact to those units and also minimize noise & vibration impacts to the whole building as well as the surrounding neighborhood.

LECHMERE STATION.
At present, your designs show the new Lechmere Station so close to the Glass Factory that it appears to be part of our condominium building. Please move the station closer to East Street, where it could be part of the entrance way to the eventual North Point development. The station design needs to be substantially improved so it is not an eyesore but rather an enhancement to this rapidly developing neighborhood. It should reflect the importance of this location as the gateway between Cambridge & Boston.

BUS TRAFFIC.
The many bus lines that converge on Lechmere Station are presently designed to enter at one end of our building, pick up passengers, and emerge at the other end of our condo building. Please do not route bus traffic, directly under our windows. Bus traffic noise, vibrations and fumes are a great concern. Sidewalks where passengers wait, should also be moved farther from our building to preserve our privacy and minimize impacts from noise, light and smoking. If too close, it will feel like we are living in the bus station.

PRESERVE OUR TREES & GREEN SPACE.
Presently there is a row of mature evergreen trees behind our building. I urge you to preserve all these trees and the entire small green space behind our building. The current fence could be replaced with more substantial screening lined with additional trees and then the tracks placed beyond this screen. Sidewalks should be on the far side of the large trees. These trees serve as a natural screen for the tracks and busway.

I-345-001

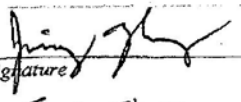
Please see Comment Letter I-013.

MAINTENANCE FACILITY.
I strongly oppose the Mirror H location. It is much too close to the Glass Factory and other residential buildings and will effectively destroy further development in North Point. Putting a maintenance facility on prime land in a desirable, developable location that would generate significant tax revenue to Cambridge simply does not make sense. Of the three options proposed, Option L seems to be the best choice however I would prefer there be no maintenance facility in this area but rather it be at the end of the line.

REDUCE SURFACE PARKING.
The present Lechmere Station is at the end of the Green Line. That will no longer be the case with the new Green Line Extension and the number of parking spaces should be substantially reduced. Please consider using the under-utilized parking garages that are already in this neighborhood. Surface parking is bad urban design and should be minimized in the new North Point neighborhood. One half of our building will overlook the new parking and we request it be carefully designed with this in mind. Ample green space should be included in the design and all lighting should be down lighting that minimizes light pollution to our building.

Thank you for hearing my concerns.

Sincerely,



Signature

Jimmy Zhang

Print Name

169 Monsignor O'Brien Hwy Unit 515

Address 917 496 1594

H2

November 19, 2009

Secretary Ian Bowles
Executive Office of Energy and
Environmental Affairs
MEPA Office, Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge St, suite 900
Boston, MA 02114

RECEIVED
NOV 30 2009
MEPA

Dear Sir/Madam:

We would like to comment on the Green Line Extension Project's Draft Environmental Impact Report that was discussed at the public meeting on November 18, 2009 at Somerville High School.

I-346-001

Please keep the MEPA process open and continue the environmental review. There is no *final* Impact Report so it is difficult to determine the complete scope. Also, since it is only a 10% plan there is more work that needs to be done. The air quality study is not complete. The negative factors greatly outweigh the positive factors. A traffic study needs to be completed---much more thoroughly.

We do not approve of the Green Line Extension, especially to Medford (College Ave and Rte 16). Please continue the process as a MEPA certificate cannot be issued based on the report that we were told about on November 18, 2009.

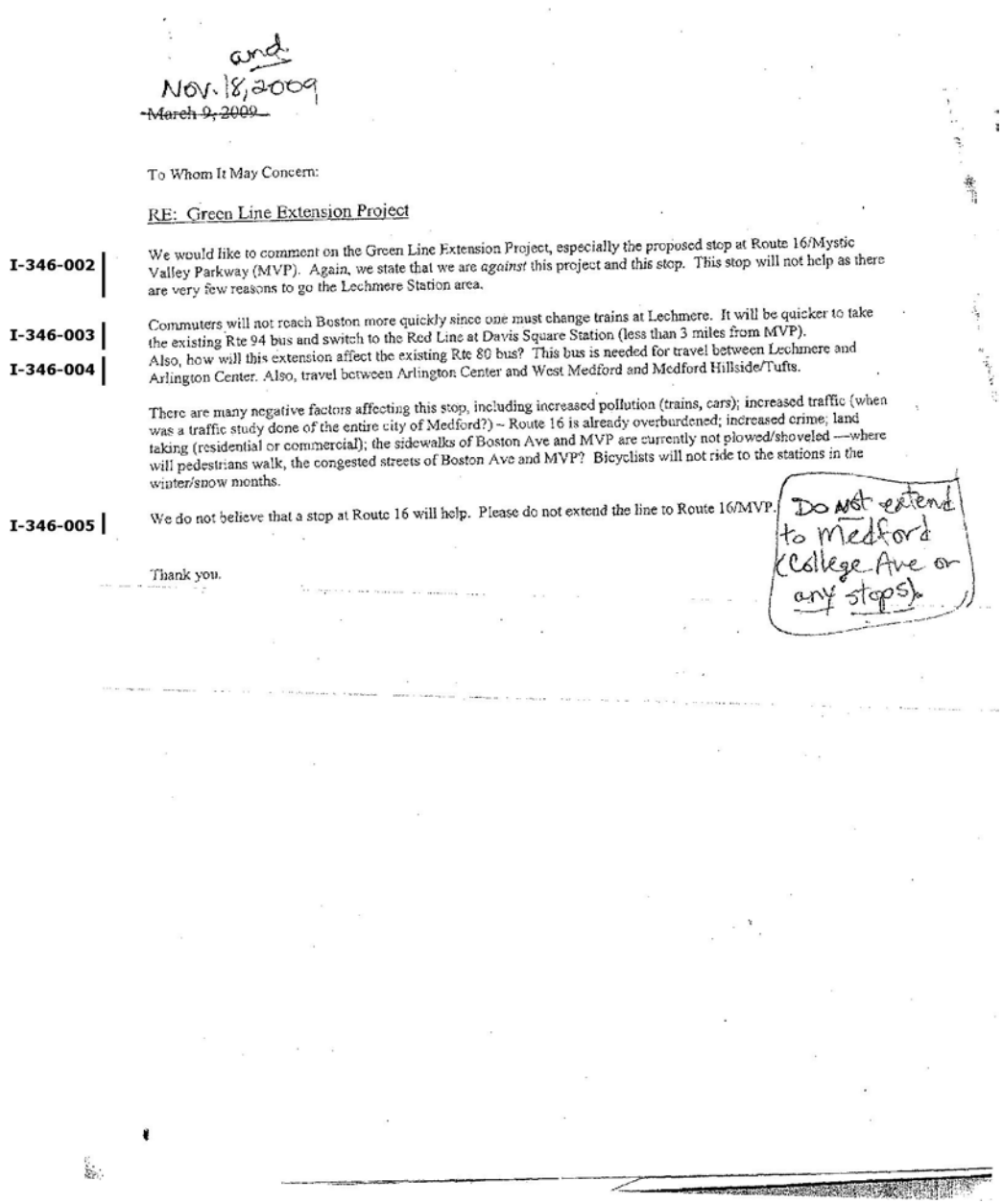
Thank you.

Attachment (1 pg)

Cc: Katherine Fichter
Massachusetts Department of Transportation
Office of Transportation Planning
10 Park Plaza, Rm 4150
Boston, MA 02116

I-346-001

In accordance with the Secretary's Certificate on the DEIR/EA, MassDOT has prepared an FEIR for the Green Line Extension Project. This limited scope FEIR addresses those requirements specified in the Secretary's Certificate on the DEIR/EA.



and
Nov. 18, 2009
~~March 9, 2009~~

To Whom It May Concern:

RE: Green Line Extension Project

I-346-002 | We would like to comment on the Green Line Extension Project, especially the proposed stop at Route 16/Mystic Valley Parkway (MVP). Again, we state that we are *against* this project and this stop. This stop will not help as there are very few reasons to go the Lechmere Station area.

I-346-003 | Commuters will not reach Boston more quickly since one must change trains at Lechmere. It will be quicker to take the existing Rte 94 bus and switch to the Red Line at Davis Square Station (less than 3 miles from MVP).

I-346-004 | Also, how will this extension affect the existing Rte 80 bus? This bus is needed for travel between Lechmere and Arlington Center. Also, travel between Arlington Center and West Medford and Medford Hillside/Tufts.

There are many negative factors affecting this stop, including increased pollution (trains, cars); increased traffic (when was a traffic study done of the entire city of Medford?) – Route 16 is already overburdened; increased crime; land taking (residential or commercial); the sidewalks of Boston Ave and MVP are currently not plowed/shoveled —where will pedestrians walk, the congested streets of Boston Ave and MVP? Bicyclists will not ride to the stations in the winter/snow months.

I-346-005 | We do not believe that a stop at Route 16 will help. Please do not extend the line to Route 16/MVP.

Do not extend to Medford (College Ave or any stops)

Thank you.

I-346-002

Although the extension to Mystic Valley Parkway/Route 16 was considered the Preferred Alternative for a full-build of the Green Line Extension Project, limitations on available funding prohibit the Commonwealth from extending the Green Line beyond College Avenue at this time. A future extension to Mystic Valley Parkway/Route 16 will require a separate environmental clearance process. MassDOT is considering initiating a community planning process for a future extension to Mystic Valley Parkway/Route 16 to obtain stakeholder input on station design and layout, neighborhood impacts, economic development, and other area planning issues.

I-346-003

Both Green Line Extension branches (College Avenue and Union Square) would continue through Lechmere Station and downtown Boston without requiring transfers.

I-346-004

To the extent possible, Green Line Extension stations will be designed for accessible, convenient transferring between MBTA bus routes and Green Line light rail during preliminary engineering. MassDOT will work with the MBTA during preliminary engineering to evaluate opportunities to improve connections between existing bus routes and proposed stations. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, describes MassDOT's plans for public outreach as station designs are refined in the next phases of the Project.

I-346-005

MassDOT has noted and considered your comment. Thank you for your interest in the Green Line Extension Project.

To all of the people at the:
Mass. Dept.of Transportation and any others involved with the Green Line Extension Project:

I-347-001

I am writing you today as a Somerville resident of 23 years and a Brickbottom Artist Community live/work Resident of just over 12. I want to express my concern with the continuation of this project and more specifically the proposed placement of the Maintenance Facility. The continuation of the project with the current location at 'YARD 8' would yield major problems for this city and more particularly with our neighborhood here at Brickbottom.* The impact that this Maintenance Facility would have on this neighborhood, this building and it's residents (my neighbors) at it's current proposed location will throw a very large wrench into what has been recognized as a rather successful conscious effort to supply artists (the undeniably necessary elements of society) a place to be able to live and work comfortably within this city. For those who are not familiar with Brickbottom Artists Building, we are a group of artists that started our community over 22 years ago and to this day are recognized as one of the oldest and more successful artist communities in the country. We are important to Somerville and the fabric of Boston/Cambridge /Somerville. We are Community oriented, take great pride and concern in keeping our building and grounds up and clean and invite the public in annually to introduce ourselves and share our art with people from all over Massachusetts.

The impact that this proposed Maintenance Facility as you well know is going to have ramifications that will render this area useless and barely habitable. I am speaking of the noise pollution that will be inescapable as will be the vibrations that are inevitably created. Not to mention the havoc it will wreak on the already weakened property values and it will create an eyesore that no one is going to want to look at. It will render this neighborhood the armpit of Somerville, further obstructing any possible tax revenues as this will become the least desirable area of Somerville where at least without this proposed facility it could well be slated to be developed into an area where people would enjoy coming for shopping, restaurants and commercial shopping.

I-347-002

I am not opposed to the Green Line Project in any way at all. In fact am quite in favor of it. I just personally believe that a **LOT MORE** consideration needs to be given to the idea of what is going to happen to this neighborhood and this whole quarter of Somerville, if this is pushed through. It saddens me greatly that such a lack of consideration is given to the ramifications of people's lives and the contribution to society in the name of progress.

I-347-003

There are many things which need to be considered not the least of which is the mitigation necessary to lessen the impact of a project of this size. At the meetings I have attended I have heard time and again **"We get 1 chance, ONE CHANCE to do this, so, let's do it right and not in hindsight say that we didn't even think about the ramifications of these issues in this light"**.

I-347-004

We here at Brickbottom Artists Community as well as in other parts of Somerville and Cambridge are urging you to use all the insights and foresights we have supplied you with to reconsider using 'Mirror H' at the very least, and to truly deeply consider what you are doing to people, families, a neighborhood..... a city.

Thank-You for your Re[illegible]ion of this vital issue,

RECEIVED
JAN 8 2010
MEPA

James X. Delci
C-104
1 Fitchburg St.
Somerville, MA 02143

I-347-001

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is included in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Yard 8 location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-347-002

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. The evaluation considers land use and connectivity impacts and opportunities associated with each maintenance facility site alternative.

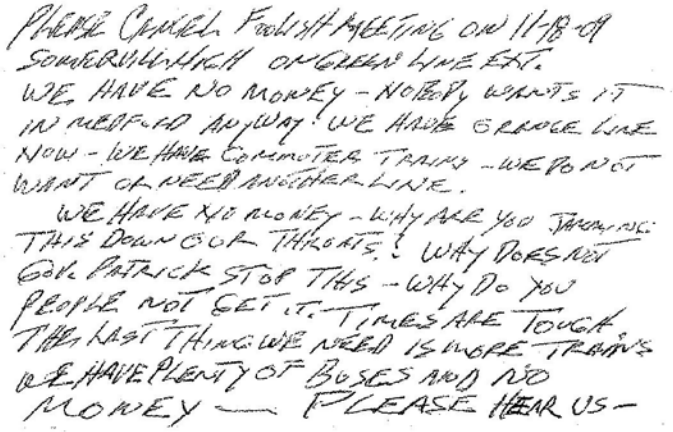
I-347-003

MassDOT has developed proposed mitigation measures / draft Section 61 findings for the Green Line Extension Project. These are provided in FEIR Chapter 8, Draft Section 61 Findings and Mitigation Measures. The mitigation measures, steps for implementation, and post-construction monitoring required by the Secretary's Certificate on the DEIR are also described in FEIR Chapter 8.

I-347-004

An expanded technical and environmental analysis of the light rail storage and maintenance facility alternatives is provided in FEIR Chapter 2, Maintenance Facility Alternatives Analysis. As a result of the evaluation, the Mirror H location is not recommended for further consideration and Option L is identified as the preferred maintenance facility site.

I-347-005


PLEASE CANCEL FOR LIGHT MEETING ON 11-18-09
SOMEWHERE HIGH ON GREEN LINE EXT.
WE HAVE NO MONEY - NOBODY WANTS IT
IN NEEDED ANYWAY. WE HAVE ORANGE LINE
NOW - WE HAVE COMMUTER TRAIN - WE DO NOT
WANT OR NEED ANOTHER LINE.
WE HAVE NO MONEY - WHY ARE YOU JAMMING
THIS DOWN OUR THROATS! WHY DOES NOT
GOV. PATRICK STOP THIS - WHY DO YOU
PEOPLE NOT GET IT. TIMES ARE TOUGH
THE LAST THING WE NEED IS MORE TRAINS
WE HAVE PLENTY OF BUSES AND NO
MONEY — PLEASE HEAR US —

I-347-005

The Project's Purpose and Need is described in DEIR/EA Chapter 2, Purpose and Need. The Project is needed to comply with the State Implementation Plan (SIP), which includes requirements for this Project as well as other transit projects to meet the air quality and transit commitments established as a result of the Central Artery/Tunnel project.

Secretary Ian Bowles
Executive Office of Energy and Environmental Affairs
MEPA Office
Attn: Holly Johnson, MEPA Analyst
EEA #13886
100 Cambridge Street, Suite 900
Boston, MA 02114

RECEIVED
NOV 18 2009
MEPA

Dear Secretary Bowles,

As a longtime resident of East Cambridge and a advocate of the East Cambridge Planning Team, I am writing to express my concerns and those I have heard over the years from neighbors about the planned move of the Lechmere T station across McGrath Highway..

Lechmere Square is a major gateway to East Cambridge and an integral hub of our neighborhood. According to reports from those studying area business potential, approximately one million people cross Cambridge Street from the present stop at Lechmere to shop at the Galleria Mall on First Street every year. That number alone, along with residents using public transportation is an inordinate amount of people to cross a major highway.

I-348-001 One of our principal concerns is safety. Crossing a major highway and a busy intersection can present problems for the development of the new station as well as for those using public transportation. We want to be sure that all crossings at Cambridge Street and Monsignor O'Brien Highway are well designed and offer the utmost protection.

I-348-002 Another concern is the design of the station. The preliminary design shown to residents at a recent meeting left much to be desired. Why are we being asked to purchase the Charlie Card while standing out in the elements? There appears to be no lobby in the present plans. Furthermore, the entrance is not convenient to anyone coming from the East Cambridge neighborhood or the Mall. There needs to be more than one entrance and easy access for the handicapped. We sincerely believe that the Green Line and bus station design need to be properly integrated with the future Northpoint street grid. This will further insure safety for those using the bus service and the T.

I-348-003 Last but not least, I would like to see the historic station buildings redeveloped around a new public market square. I firmly believe that this concept could be done with little or no expense to the T. A lively square/market area will make crossing two busy streets easier for those using public transportation and will add to the value of the area. Make Lechmere a destination not a transition point.

Thank you for your consideration.

I-348-001

Revised conceptual plans for Lechmere Station are included in FEIR Chapter 5, Lechmere Station. The chapter presents a traffic analysis, a detailed description of pedestrian crossings of O'Brien Highway, and proposed roadway, crosswalk, and sidewalk improvements that are consistent with the NorthPoint development plans. These station and street plans will be further refined in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-348-002

Revised conceptual plans for Lechmere Station, including modifications to the station headhouse and entrances, enclosed automatic fare collection, and other amenities are included in FEIR Chapter 5, Lechmere Station. These plans will be further developed in the preliminary engineering stage of the Project. The Public Involvement Plan (PIP), Chapter 6 of the FEIR, proposes a structure for community involvement during station design.

I-348-003

As part of the Green Line Extension, MassDOT intends to demolish the existing Lechmere Station and prepare the site for potential future redevelopment. Based on the current requirements of the O'Brien Highway roadway improvements (as shown in FEIR Chapter 5, Lechmere Station), the existing bus shed must be removed.

Appendix B
Environmental Analysis of Additional Maintenance Facilities Technical Memorandum

Technical Memorandum

Green Line Extension Project

Environmental Analysis of Additional Maintenance Facilities

Prepared for **Massachusetts Department of Transportation**
Boston, Massachusetts

Prepared by ***VHB*/Vanasse Hangen Brustlin, Inc.**
Boston, Massachusetts

in association with
PB Americas, Inc., Boston, Massachusetts
Harris Miller Miller & Hanson, Inc., Burlington, Massachusetts
Public Archaeology Laboratory, Pawtucket, Rhode Island

April 21, 2010

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1 Introduction

1.1 Introduction

On October 15, 2009, the Massachusetts Department of Transportation (MassDOT) filed the Green Line Extension Project *Draft Environmental Impact Report/Environmental Assessment* (DEIR/EA) with the Massachusetts Environmental Policy Act (MEPA) Office. The submission of the DEIR/EA was a major milestone in the development of the Green Line Extension Project, a legal requirement of the Commonwealth of Massachusetts under the State Implementation Plan (SIP). The Commonwealth is committed to initiating passenger service on the Green Line Extension Project by December 31, 2014. In order to meet that commitment, a vehicle maintenance and storage facility must be constructed to support the operations of the Green Line Extension.

The DEIR/EA stated that the area referred to as "Yard 8 with Adjacent Parcel" (Yard 8) was selected as the preferred location for the construction of a Green Line vehicle storage and maintenance facility, given its combination of size, configuration, and adjacency to the Green Line Extension tracks. The selection of the Yard 8 site prompted local opposition from some municipal officials, elected representatives, and abutting residents. To try to address and resolve these concerns, MassDOT qualitatively analyzed two additional possible sites for the facility in December 2009.[1] Option L, a site conceived by MassDOT, is immediately adjacent to the Massachusetts Bay Transportation Authority's (MBTA) Commuter Rail maintenance facility, also referred to as the Boston Engine Terminal (BET). Mirror H, a site proposed by the City of Somerville, straddles the Inner Belt area of Somerville and the NorthPoint area of Cambridge. All three maintenance facility alternatives are shown on Figure 1-1.

1 Massachusetts Department of Transportation. *Green Line Extension Project, Additional Maintenance Facility Alternatives Analysis*. December 9, 2009.

The December 2009 *Additional Maintenance Facility Alternatives Analysis*[2] included an analysis of operations, property acquisition needs, and schedule implications, as well as a preliminary evaluation of potential environmental impacts and costs. It did not include an in-depth environmental analysis of the type presented in the DEIR/EA for the Yard 8 site. This qualitative analysis concluded that both Yard 8 and Option L remained viable locations for the Green Line Extension Project support facility, while the Mirror H site rated lower in a number of categories.

Following an extensive public review and comment period on the DEIR/EA, on January 15, 2010, the Secretary of the Executive Office of Energy and Environmental Affairs (EEA) issued a Certificate on the DEIR. The Secretary's Certificate required MassDOT to prepare a Final Environmental Impact Report (FEIR) for the Green Line Extension Project, including a more detailed, quantitative analysis of the environmental and operational impacts associated with Option L and Mirror H. In response, MassDOT has now prepared that analysis, documented in this technical memorandum. The full environmental analysis for Yard 8 was conducted for and included in the DEIR/EA, but has been repeated in this document for comparison purposes.

MassDOT will review and consider the DEIR/EA comments on the maintenance facility together with the outcome of this analysis to decide whether to substitute either Option L or Mirror H for Yard 8 as the preferred site for the storage and maintenance facility for the Green Line Extension Project.

1.2 Project Background

The Green Line Extension Project is an initiative of MassDOT and the MBTA to enhance transit service in order to improve mobility and regional access for residents in the municipalities of Cambridge, Somerville and Medford.

The Proposed Project documented in the DEIR/EA includes:

- Extending Green Line service to Medford within the existing MBTA Lowell Line Commuter Rail right-of-way (the Medford Branch), from a newly relocated Lechmere Station terminating at Medford Hillside in the vicinity of College Avenue with intermediate stations at Brickbottom, Lowell Street, Gilman Square, and Ball Square.
- Extending Green Line service to Union Square in Somerville (the Union Square Branch), within the existing MBTA Fitchburg Line Commuter Rail right-of-way with a station near Union Square.

2 Massachusetts Department of Transportation. *Green Line Extension Project, Additional Maintenance Facility Alternatives Analysis.* December 9, 2009.

Numerous studies over the last 40 years have explored extending public transit from Lechmere Station (the current terminus of the Green Line) along the existing MBTA Lowell or MBTA Fitchburg Line Commuter Rail rights-of-way. In 2005, the *Beyond Lechmere Northwest Corridor Study* conducted a *Major Investment Study/Alternatives Analysis* that evaluated a wide range of technologies and operating plans for a future extension. The *Beyond Lechmere Northwest Corridor Study* did not identify a preferred alternative for an extension, but rather investigated a range of cost-effective transit solutions that would increase transit accessibility, improve corridor mobility, increase transit services, and support opportunities for smart growth initiatives and sustainable development.

An Expanded Environmental Notification Form (EENF) was submitted to EEA on October 10, 2006. The Secretary of EEA issued a Certificate on the EENF on December 1, 2006, requiring the preparation of a DEIR for the Green Line Extension Project.

The DEIR/EA was submitted to EEA on October 15, 2009. Because MassDOT is seeking funding through the Federal Transit Administration (FTA), the Project also requires review under the National Environmental Policy Act (NEPA). Therefore, the document submitted to MEPA on October 15, 2009 served as a joint DEIR/EA. After an extensive public review and comment period, the Secretary of EEA issued a Certificate on the DEIR on January 15, 2010, requiring the preparation of a limited FEIR for the Proposed Project. MassDOT is currently preparing that document, which will include the more detailed environmental and further operational analysis of the maintenance facility alternatives. At the request of the FTA, MassDOT is also preparing a stand-alone Final EA.

1.3 Contents of this Technical Memorandum

Chapter 2 of this technical memorandum provides a description of the three alternatives being evaluated – Yard 8, Option L and Mirror H. The program, operational plan, real estate impacts and costs are provided for each maintenance facility alternative. Chapter 3 documents and compares any environmental resource impacts from the construction of each of the three maintenance facility alternatives. Chapter 4 describes any construction impacts and construction mitigation measures associated with each of the three maintenance facility alternatives. Chapter 5 provides a comparison summary of environmental impacts for the three maintenance facility alternatives.

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2

Description of Alternatives

This chapter provides a description of the three locations evaluated as part of the environmental analysis of additional maintenance facility alternatives for the Green Line Extension Project – Yard 8, Option L and Mirror H. The program, operational plan, real estate impacts and cost for each maintenance facility alternative are provided. Figure 1-1 shows the location of the three alternatives under evaluation.

2.1 Yard 8

Yard 8 is an approximately six-acre railroad yard adjacent to the proposed Green Line alignment and accessed from Inner Belt Road in Somerville. The yard is partially owned by the MBTA and by Pan Am Railways. The Pan Am Railways' portion of the yard is currently used for freight operations while the MBTA portion of the yard is currently inactive. This site, combined with an adjacent undeveloped parcel at 200 Inner Belt Road, was previously determined to be the preferred maintenance facility site that could accommodate the necessary maintenance facility components for the Green Line Extension Project. A detailed environmental analysis of the Yard 8 site was provided in the DEIR/EA. Figure 2-1 shows the proposed layout of the Yard 8 maintenance facility alternative.

2.1.1 Program

Yard 8 accommodates the defined support facility program including, but not limited to: storage for 80 Green Line vehicles, two pit tracks, two lift tracks, one wheel truer track, support shops, Green Line vehicle wash, administrative office space, and an approximately 100-space employee parking lot.

Combining the MBTA and Pan Am Railways' portions of Yard 8 would result in sufficient area to accommodate the Green Line Extension tracks and a five-track storage facility that could store 70 vehicles. The shape of Yard 8 is well-suited to provide a double-ended storage yard, with lead tracks at each end feeding ladder tracks which fan out to the five storage tracks.

The layout of Yard 8 allows for a single storage yard north of the maintenance building. Total capacity of the storage yard is 70 cars. It is assumed that, at any one time, 10 additional cars would be in the maintenance shop building or temporarily stored on the tracks just outside the building. The building and the yard are proposed to be approximately at the existing grade of the site.

Both the building and the storage yard have double-ended access, which provides redundancy so that operations can be maintained even if a train should derail in the yard. With only single-ended access, a derailment at a critical location in the yard could block trains from entering or leaving the yard, resulting in serious impacts to Green Line service.

This alternative could accommodate potential future air rights development.

2.1.2 Operational Plan

This section describes the operational interface of Yard 8 with future Green Line Extension operations as it impacts existing railroad operations.

Yard Interface with Green Line Extension Operations

The facility layout includes a double-ended yard which provides the necessary redundant connections to the mainline of the Green Line Extension. Light rail vehicles can directly enter and exit the yard from both the north and south ends of the yard, eliminating the need for any reverse moves[3] or switchbacks for access to the mainline, providing optimal operational efficiencies.

The Yard 8 layout includes three leads that provide access into and out of the storage and maintenance facilities, providing access in both directions on the mainline of the Extension (Lechmere Station to Medford Hillside). Reverse moves from the yard would be needed in order for vehicles to access the Union Square Branch.

Medford Lead

At the north end of the yard, the Medford Lead track connects to the mainline just north of Brickbottom Station. This lead is an extension of the north ladder of the storage yard.

Trains leaving the yard for Medford Hillside would use this lead to reach the northbound mainline track and continue to Medford Hillside. Trains from Medford Hillside heading to the yard would use the southbound track until they cross over to the northbound track north of Washington Street and then enter the yard using the Medford Lead turnout. All storage tracks have direct movements (i.e., no reversing required) to and from the Medford Lead track.

3 A reverse move is when the operator would have to stop the train, leave the control cab at one end of the train and walk to the other end of the train and enter the control cab to operate the train.

Lechmere Station Lead

At the south end of the yard, the Lechmere Station Lead track connects to the mainline just south of the proposed Green Line bridge (formerly the Red Bridge) over the Fitchburg Mainline. This lead is an extension of the south ladder of the storage yard.

Trains leaving the yard for Lechmere Station or points west use this lead and enter the northbound mainline track through the turnout at the south end of the lead and cross over from the northbound to the southbound mainline track and continue on to Lechmere Station. Trains from Lechmere Station heading to the yard use the turnout at the south end of the lead track from the northbound mainline track to enter the yard.

Maintenance Lead

A third lead track into the maintenance facility portion of the yard branches off the outbound loop track headed towards Union Square. Northbound trains from Lechmere Station can enter the yard by first taking the turnout onto the Union Square Branch (north of Lechmere Station) and then take a second turnout onto the Maintenance Lead and into the yard at a point just south of the maintenance building.

Trains To/From Union Square

As this facility does not have a direct connection to Union Square, trains from the yard could reach Union Square in either of the following ways. Trains could proceed towards Lechmere Station and the Central Subway, and reverse direction either at Lechmere Station or at the Brattle Loop at Government Center Station. Changing direction at Lechmere Station would require a reverse movement on revenue track, potentially impacting revenue service operations. The second option would be for trains to leave the yard via the Maintenance Lead. They would enter the outbound track to Union Square and reverse direction on this revenue track before proceeding to Union Square.

On the Union Square Branch, there is only the terminal station on this line, so trains on this service would continue to deadhead (i.e., run without picking up passengers) to Union Square. Trains from Union Square to the yard would need to proceed inbound and reverse direction either at Lechmere Station or at the Brattle Loop at Government Center Station.

Daily Operations - Storage

In the morning, trains would leave the storage yards for Medford Hillside, Union Square and inbound towards Lechmere Station. Prior to the start of revenue operations at 5 AM, the initial trains would deadhead to their respective origin stations. After 5 AM, trains for Medford Hillside could either deadhead or enter revenue service at Brickbottom Station.

Trains would continue to leave the yard until all peak hour service trains are in operation. Toward the end of peak service (approximately 9 AM), some trains would come out of service and return to the yard. In the afternoon, prior to the evening peak, these cars would leave the yard and return to service. After the evening peak, a number of cars would again return to the yard while the remainder handle the night service schedule. At the end of the service day, the remaining trains would return to the yard, with the last ones arriving after the end of revenue service at 1 AM.

Impacts to Existing Railroad Operations

The construction of Yard 8 would remove all existing freight trackage within Yard 8 and the Wiley Track, a connecting track between the south end of Yard 8 and the Valley Tracks. Thus, this option would require some revisions to current freight operations by Pan Am Railways. However, based on on-going discussions with Pan Am Railways, none of this would preclude existing overall freight rail operations in the area.

Pan Am Railways' freight trains reach Boston via the MBTA Lowell Line. Typically, there are about three to four round-trips per week for the local switching operation, which serves Somerville as well as Chelsea, Salem, and Peabody via other MBTA routes. In addition, the "sand and gravel unit train" to Boston Sand and Gravel in Charlestown makes another three to four round-trips a week. Most freight trains operate in the evening or night, when MBTA Commuter Rail operations are less frequent.

The main impact to freight operations would be the reconstruction of Yard 8, converting it from a freight rail yard to a Green Line storage and maintenance yard. Currently, Pan Am Railways has two tracks in the yard: one through track and one storage track. Pan Am Railways' freight trains coming down the MBTA Lowell Line pass through Yard 8, occasionally temporarily storing freight cars in the yard.

If Yard 8 were dedicated to the Green Line, it would still be possible for Pan Am Railways to access the Boston area and to store freight cars in other nearby locations. Alternative routes exist within the MBTA system to support Pan Am Railways' operations. There is no impact to CSX freight rail operations with this option. CSX freight trains could continue to operate as they do today with a Green Line maintenance facility at Yard 8.

Yard 8 would not preclude the future North-South Rail Link project or the ability to expand the BET facility within existing MBTA property limits.

2.1.3 Real Estate Impacts

Yard 8 fits within existing rail yards owned by the MBTA and Pan Am Railways. The maintenance facility building would be on private land (the undeveloped portion of 200 Inner Belt Road) that is currently vacant and, therefore, no buildings, structures or businesses would need to be removed or relocated. Maintenance facility uses are consistent with the existing industrial zoning for the area. Table 2-1 provides a list of properties that would need to be acquired for Yard 8. This alternative requires the acquisition of approximately 5.8 acres of land, which is estimated at approximately $15 million.

Table 2-1 Potential Property Acquisitions for Yard 8

Address	Owner/Occupant	Acreage	Full or Partial Lot Acquisition
200 Inner Belt Road, Somerville	Fine Arts Storage Partners	3.9	Partial (undeveloped portion)
0 Inner Belt Road, Somerville	Pan Am Railways (rail yard)	1.9	Full
TOTAL		*5.8 acres*	

The undeveloped parcel at 200 Inner Belt Road (also referred to as 150 Inner Belt Road) that would be acquired for the maintenance facility has an existing land use permit for the construction of a proposed 190,000-square-foot building approximately 64 feet high. The proposed building and the proposed maintenance facility cannot share the site due to space constraints. Therefore, the maintenance facility would require voiding the existing land use permit. If the MBTA acquired the land within the footprint of the facility (tracks and buildings) in fee, this would represent a loss of current tax revenue to Somerville as the MBTA is exempt from local property taxes. This alternative could result in the loss of potential tax revenue which would be generated by future development at this location.

As part of the amendment to the original NorthPoint development agreement, the MBTA has an option to acquire the portion of Yard 8 that is currently owned by Pan Am Railways. Although the Commonwealth would still need to pay for the land, acquisition of this site could be easier than under typical circumstances because of the proposed agreement.

2.1.4 Order-of-Magnitude Capital Costs

An Order-of-Magnitude conceptual capital cost estimate for the proposed maintenance and storage facility at Yard 8 was developed and is estimated to be approximately $79 million in 2008 dollars. Since the publication of the DEIR, the design of Yard 8 was refined to make it more operationally consistent with the other two alternatives. Table 2-2 provides a breakdown of the conceptual capital cost estimate for Yard 8.

Table 2-2 Order-of-Magnitude Conceptual Capital Cost Estimate for Yard 8

	Cost ($2008)
Real Estate Acquisition	$ 15 M
Building	$ 38 M
Track	$ 22 M
Infrastructure	$ 2 M
Earthwork	$ 2 M
Total	Approx. $ 79 M

2.2 Option L

Option L is immediately adjacent to and northwest of the MBTA's Commuter Rail maintenance facility, also referred to as the Boston Engine Terminal (BET). Option L is along the southern and southeastern fringe of the existing Inner Belt industrial area of Somerville. The layout of yards and buildings is in an "L" shape and adjacent to the Valley Tracks just north of the MBTA's BET. Figure 2-2 shows the layout of the Option L alternative.

2.2.1 Program

Option L accommodates the same defined support facility program as Yard 8, including but not limited to: storage for 80 Green Line vehicles, two pit tracks, two lift tracks, one wheel truer track, support shops, Green Line vehicle wash, administrative office space, and an approximately 100-space employee parking lot. The maintenance building and associated track work are proposed on land adjacent to and northwest of the existing BET facility. That land is currently occupied by two businesses at 20 Third Avenue and 44-48 Third Avenue. The vehicle storage yard is proposed at the southern end of Inner Belt Road just north of the MBTA Fitchburg Line on vacant private property and land that is currently an unused parking lot for 70 Inner Belt Road.

The layout of Option L includes two storage yards and the maintenance building. The south yard is immediately south of the hook in Inner Belt Road. This yard includes eight storage tracks and a runaround track. The south yard would store up to 40 cars. The east yard is east of the maintenance building and just south of Third Avenue. This yard provides eight vehicle storage tracks and has a total capacity of 27 cars. Total capacity of the storage yards is 67 cars. For Option L, 13 cars would need to be stored in the building or tracks just outside the buildings at any given time in order to meet program storage requirements.

The maintenance building for Option L would be identical in size and layout to the building proposed for Yard 8 and Mirror H. The main difference is the location of the building. For Option L, it would be south of Third Avenue and east of the existing building at 70 Inner Belt Road.

To provide double-ended access to the maintenance building, a loop track is added which provides access to the north side of the building from a runaround track to the east of the building and the east storage yard.

This alternative could accommodate potential future air rights development.

2.2.2 Operational Plan

This section describes the operational interface of Option L to future Green Line Extension operations and impacts to existing railroad operations.

Yard Interface with Green Line Extension Operations

Option L is the only one of the three alternatives discussed in this report that provides a direct connection to the Union Square Branch. This advantage allows trains to be dispatched directly from the yard to both termini, at Medford Hillside and at Union Square, without the need to perform a reverse move (would not impact revenue operations). Option L has two lead tracks that provide access into and out of the storage yards and maintenance facility.

Medford Lead

The main yard lead is oriented for movements to and from Medford Hillside. The lead is an extension of the west ladder of the south yard and rises up adjacent to the mainline until it connects with the mainline south of Brickbottom Station.

Trains leaving the yard for Medford Hillside would use this lead to reach the northbound mainline track and continue on to Medford Hillside. Trains from Medford Hillside heading to the yard would use a crossover south of Brickbottom Station to reach the northbound main and then the yard lead track.

All storage tracks in the south and east yards have direct movements (i.e., no reversing required) to and from the Medford Lead track.

Trains to/from Lechmere Station and Central Subway

For trains leaving the yard for Lechmere Station or the Central Subway, there is a tail track provided at the north end of the Medford Lead track. This tail track can hold a three-car train. The trains for Lechmere Station would leave the storage track, ascend the grade on the Medford Lead track and enter the tail track and stop. The operator must switch ends of the train to reverse direction, but this would be done on the tail track not on a mainline track. Therefore, there would be no impacts to revenue service. There is a crossover from the tail track to the northbound mainline track. The train would enter the northbound mainline track and then quickly use

another crossover to reach the southbound mainline track and proceed to Lechmere Station.

For trains from Lechmere Station entering the yard, the train would cross over from the northbound mainline track to the tail track. After reversing direction on the tail track, the train would descend the Medford Lead track into the storage yard.

Union Square Lead

The location of Option L provides a unique opportunity to make a direct connection between the Union Square Branch and the storage yard. This direct connection is not possible with Yard 8 or Mirror H. The Union Square Lead track is a short track connecting to the Union Square Branch outbound track just east of where the mainline crosses overhead. The lead track connects into the south storage yard.

Trains leaving the yard for Union Square would take the Union Square Lead track and enter the Union Square Branch outbound track and continue on to Union Square. Trains from Union Square headed to the yard would run "against the current" on the outbound track from a crossover approximately 2,000 feet west of the Union Square Lead track. However, given the proposed headways on the Union Square Branch, there should be no conflicts that hamper revenue service. Therefore, unlike Yard 8 and Mirror H, Option L would not need to deadhead trains returning to the Yard from Union Square to reverse in revenue traffic at Lechmere Station or turn around at Government Center Station.

Daily Operations - Storage

In the morning, trains would leave the storage yards for Medford Hillside, Lechmere Station and Union Square. Prior to the start of revenue operations at 5 AM, the initial trains would deadhead to their respective terminal stations. After 5 AM, trains for Medford Hillside could either deadhead or enter revenue service at Brickbottom Station. On the Union Square Branch, there is only one terminal station so trains on this service would continue to deadhead to Union Square.

Trains would continue to leave the yard until all peak hour service trains are in operation. Toward the end of peak service (approximately 9 AM), some trains would come out of service and return to the yard. In the afternoon, prior to the evening peak, these cars would leave the yard and return to service. After the evening peak, a number of cars would again return to the yard while the remainder handled the night service schedule. At the end of the service day, the remaining trains would return to the yard, with the last ones arriving after the end of revenue service at 1 AM.

Impacts to Existing Railroad Operations

Option L would impact Pan Am Railways' freight operations to the same degree as Yard 8. Both options would require the removal of the Wiley Track which connects the south end of Yard 8 to the Valley Tracks. Without the Wiley Track, Yard 8 would

be a two track stub end (single-ended) yard which would have little utility to Pan Am Railways' operations. M.S. Walker, a current freight customer of Pan Am Railways, is a business that would have to be relocated to make room for the Green Line maintenance facility. Alternative routes exist within the MBTA system that could support Pan Am Railways' service to other customers.

Option L would not have any impacts on revenue passenger operations or on other operations associated with the MBTA (e.g., vehicle storage and maintenance, maintenance-of-way). Option L would have no impacts on existing CSX operations between the Grand Junction Branch and the Valley Tracks. Option L would not preclude the future North-South Rail Link project or the ability to expand the BET facility within existing MBTA property limits.

2.2.3 Real Estate Impacts

Option L would require the complete acquisition of two parcels and partial acquisition of two other parcels. The land required for the yard and maintenance facility includes the building and parking at 44-48 Third Avenue; the building and parking lot at 20 Third Avenue; the isolated parking lot for 70 Inner Belt Road; plus the southern corner of 200 Inner Belt Road. M.S. Walker Wholesale Distribution, a wholesale manufacturer/distributor of wine and spirits located at 20 Third Avenue, provides jobs for approximately 74 people (based on parking occupancy). The building located at 44-48 Third Avenue (formerly occupied by Digital Publishing Solutions, Inc.) is being leased temporarily as an indoor parking/storage facility for federally confiscated vehicles.

This alternative requires the acquisition of approximately 10.2 acres of land and buildings which has been estimated at approximately $51 million (including building demolition and site cleanup). This cost could be refined with additional research. If the MBTA acquired the land within the footprint of the facility (tracks and buildings) in fee, this would represent a loss of current tax revenue to Somerville as the MBTA is exempt from local property taxes. This alternative could result in the loss of current and potential tax revenue which would be generated by future development at this location. Table 2-3 provides a list of properties that would need to be acquired for the Option L location. Option L does not use any portion of the Pan Am Railways' owned land at Yard 8.

Table 2-3 Potential Property Acquisitions for Option L

Address	Owner/Occupant	Acreage	Full or Partial Lot Acquisition
20 Third Avenue, Somerville	M.S. Walker Wholesale Distribution	4.6	Full
44-48 Third Avenue, Somerville	APCA Third Avenue, LLC	2.8	Full
70 Inner Belt Road, Somerville	CRG West Parking Lot	1.2	Partial
200 Inner Belt Road, Somerville	Fine Arts Storage Partners	1.6	Partial (undeveloped portion)
TOTAL		*10.2 acres*	

2.2.4 Order-of-Magnitude Capital Costs

An Order-of-Magnitude conceptual capital cost estimate for the proposed maintenance and storage facility at Option L was developed and is estimated to be approximately $129 million in 2008 dollars. Table 2-4 provides a breakdown of the conceptual capital cost estimate for Option L.

Table 2-4 Order-of-Magnitude Conceptual Capital Cost Estimate for Option L

	Cost ($2008)
Real Estate Acquisition	$ 51 M
Building	$ 38 M
Track	$ 33 M
Infrastructure	$ 2 M
Earthwork	$ 5 M
Total	Approx. $ 129 M

2.3 Mirror H

Mirror H straddles portions of the NorthPoint site (which includes portions of Cambridge, Somerville and Boston) and a portion of MBTA land. This alternative locates the facility at the north side of the proposed NorthPoint development and partly on MBTA land south of the BET, and represents a plan that places new light rail facilities next to existing MBTA Commuter Rail facilities. Figure 2-3 shows the layout of Mirror H.

This report refers to Mirror H as the option previously proposed by the City of Somerville, and then enhanced by the Project team to optimize proposed operations. The enhancements represent layout modifications to provide operational equivalency to the original "Scheme H" as presented in the November 6, 2008 *Green Line Support Facility Alternatives Analysis* for the location of the support facility. The specific enhancements include:

- Extending the double-track lead and adding switches so that trains can operate on either lead track in either direction.
- Providing a 300-foot tail track so that trains to/from Lechmere Station can make the reverse move off the mainline tracks.
- A loop east of the maintenance shop plus a shop runaround track are included to provide access to the east side of the building.
- Various minor layout modifications to make this option as operationally equivalent as possible to Yard 8 and Option L.

2.3.1 Program

Mirror H accommodates the same defined support facility program as Yard 8 including, but not limited to: storage for 80 Green Line vehicles, two pit tracks, two lift tracks, one wheel truer track, support shops, Green Line vehicle wash, administrative office space, and an approximately 100-space employee parking lot.

The layout of Mirror H includes a single storage yard of six tracks west of the maintenance building. Total storage is 70 cars. It is assumed that, at any time, 10 additional cars would be in the maintenance shop building or temporarily stored on the tracks just outside the building. Most of the storage tracks are in Cambridge, while the maintenance building would be in Somerville. Some of the employee automobile parking, as well as the tail tracks and loop east of the maintenance building, are in Boston.

The maintenance building at Mirror H would be identical in size and layout to the building proposed for Yard 8. To provide double-ended access to the maintenance building, a loop track is added which provides access to the east side of the building from a runaround track to the north of the building.

This alternative could accommodate potential future air rights development.

2.3.2 Operational Plan

This section describes the operational interface of Mirror H with the future Green Line Extension operations and impacts to existing railroad operations.

Yard Interface with Green Line Extension Operations

Mirror H is the only one of the three alternatives with a single point of access from the yard to the revenue service tracks. Since a stalled or derailed train on a single yard lead track would prevent other trains from entering or leaving the yard, a second track lead was proposed.

Double-Track Lead

The double-track yard lead is oriented for movements to and from Medford Hillside. The lead is an extension of the west ladder and runaround tracks at the storage yard. Between the west end of the storage tracks and the mainline tracks to Medford, the double-track lead rises steeply (about a six-percent grade). This is required because the double-track lead must "thread the needle" by first passing under the outbound track to Union Square and then rising quickly to the mainline grade before crossing over the MBTA Fitchburg Line tracks.

The steepness of this grade is a concern when disabled cars are being brought into the yard. The existing vehicles can handle this grade going up or down. But if the

brakes were not working properly on a disabled car, it would be difficult to descend the grade into the yard safely.

Trains leaving the yard for Medford Hillside use this lead to reach the northbound mainline track and continue on to Medford Hillside. Trains from Medford Hillside heading to the yard use a crossover south of Brickbottom Station to reach the southbound main and then the yard lead track.

All storage tracks in the yard have direct movements (i.e., no reversing required) to and from the double-track lead when traveling to or from Medford Hillside.

Trains to/from Lechmere Station and Central Subway

For trains leaving the yard for Lechmere Station or the Central Subway, there is a tail track provided at the north end of the double-track lead. This tail track can hold a three-car train. The train for Lechmere Station would leave the storage track, ascend the grade on the lead track and enter the tail track and stop. The operator would need to switch ends of the train to reverse direction. There is a crossover from the tail track to the northbound mainline track. The train would travel briefly against the current on the northbound mainline track and then use the crossover to reach the southbound mainline track and proceed to Lechmere Station.

For trains from Lechmere Station entering the yard, the train would proceed onto the lead track and then the tail track. After reversing direction, the train would descend along the lead track into the storage yard.

Trains To/From Union Square

As this facility does not have a direct connection to Union Square, trains could reach Union Square as follows -- trains could take the double-track lead to the tail track, reverse direction and proceed towards Lechmere Station and the Central Subway as described above. Trains would then reverse direction either at Lechmere Station, requiring a reverse move on revenue track, or at the Brattle Loop at Government Center Station.

On the Union Square Branch, there is only one terminal station, so trains on this service would continue to deadhead to Union Square. Trains from Union Square to the yard would need to proceed inbound and reverse direction either at Lechmere Station, requiring a reverse move on revenue track (potentially impacting revenue service), or at the Brattle Loop at Government Center Station.

Daily Operations - Storage

In the morning, trains would leave the storage yards for Medford Hillside and inbound towards Lechmere Station. Prior to the start of revenue operations at 5 AM, the initial trains would deadhead to their respective terminal stations. After 5 AM, trains for Medford Hillside could either deadhead or enter revenue service at Brickbottom Station.

Trains would continue to leave the yard until all peak hour service trains are in operation. Toward the end of peak service (approximately 9 AM), some trains would come out of service and return to the yard. In the afternoon, prior to the evening peak, these cars would leave the yard and return to service. After the evening peak, a number of cars would again return to the yard while the remainder handled the night service schedule. At the end of the service day, the remaining trains would return to the yard, with the last ones arriving after the end of revenue service at 1 AM.

Impacts to Existing Railroad Operations

Mirror H would not impact existing freight railroad operations. Pan Am Railways' operations through Yard 8 would remain as would the Wiley Track connection from Yard 8 to the Valley Tracks. Pan Am Railways' operations would continue as they do today with this option.

There is no impact to CSX freight rail operations with this option. CSX freight trains could continue to operate as they do today with a Green Line maintenance facility at the Mirror H site.

However, Mirror H would preclude the future North-South Rail Link project and the ability to expand the BET facility within existing MBTA property limits.

2.3.3 Real Estate Impacts

Mirror H would be partly in Somerville and partly in Cambridge, with some portions in Boston. If the MBTA acquired the land within the footprint of the facility (tracks and buildings) in fee, this would represent a loss of current tax revenue to the municipalities as the MBTA is exempt from local property taxes. This alternative could also result in the loss of potential tax revenue which would be generated by future development at this location. This alternative requires the acquisition of approximately 4.3 acres of developable and Pan Am Railways' owned properties, which is estimated at a value of approximately $11 million. Table 2-5 provides a list of properties that would need to be acquired for Mirror H. At the time of this analysis, discrepancies in City property limits between Somerville and Cambridge were identified and are being reviewed. The amount and cost of property acquisition for Mirror H are subject to change based on the resolution of the city boundary issue.

Table 2-5 Potential Property Acquisitions for Mirror H

Address	Owner/Occupant	Acreage	Full or Partial Lot Acquisition
NorthPoint Development Lots A/B & C/D/E/F	Pan Am Railways	4.3	Partial

2.3.4 Order-of-Magnitude Capital Costs

An Order-of-Magnitude conceptual capital cost estimate for the proposed maintenance and storage facility at Mirror H was developed and is estimated to cost approximately $82 million in 2008 dollars. Since the publication of the February 18, 2009 *Green Line Support Facility – Review of Mirror Scheme H, Addendum to the Alternatives Analysis*, the design of Mirror H has been more fully developed and refined to make it operationally comparable to Yard 8 and Option L. Table 2-6 provides a breakdown of the conceptual capital cost estimate for Mirror H.

Table 2-6 Order-of-Magnitude Conceptual Capital Cost Estimate for Mirror H

	Cost ($2008)
Real Estate Acquisition	$ 11 M
Building	$ 38 M
Track	$ 25 M
Infrastructure	$ 2 M
Earthwork	$ 6 M
Total	Approx. $ 82 M

3

Environmental Resource Analyses

3.1 Introduction

This chapter documents and compares the environmental resource impacts of the three maintenance facility alternatives. The environmental categories considered in this analysis include:

- Air quality
- Noise
- Vibration
- Traffic
- Socioeconomic impacts
- Title VI/Environmental justice
- Visual resources
- Wetlands
- Stormwater management
- Hazardous materials
- Historic and archaeological resources
- Public parks, recreation areas, and conservation land
- Section 4(f) resources
- Consistency with Federal, State and Local Planning

3.2 Air Quality

This section compares direct impacts of the three maintenance facility alternatives on air quality. None of the three maintenance facility alternatives would have a measurable impact on air quality. Any maintenance facility alternative, in conjunction with the Project, would remain compliant with the SIP and Air Pollution Control Regulations (310 CMR 7.36).

The three maintenance facility alternatives are not anticipated to generate substantial emissions because the Green Line vehicles that would be stored there would be electric and would not generate air pollution in the study area. The proposed maintenance facility itself would be an open building with no heating-related emissions.

The mobile source emissions, generated by automobiles accessing the sites, for all three alternatives would be minimal. The proposed maintenance facility would provide approximately 100 parking spaces. The majority of these trips would occur during off-peak periods when there is little congestion in the study area.

3.3 Noise

This section compares the direct noise impacts of the three maintenance facility alternatives in combination with the Green Line Extension mainline operations. The noise impact analysis for the Green Line Extension Project is based on the methodology defined in the FTA guidance manual *Transit Noise and Vibration Impact Assessment*.[4] Noise impact has been assessed at sensitive receptors and includes contributions from mainline operations and maintenance facility operations including train movements in and out of the yard, increases in noise from special trackwork, potential wheel squeal, the traction power substation, and the employee parking lot. Figures 3-1 through 3-3 show the noise study measurement locations. Figures 3-4 through 3-6 show the buildings impacted by noise prior to mitigation. Background information on noise and vibration fundamentals, descriptors, impact criteria, land use categories, existing noise conditions and sensitive land use in areas other than near the proposed maintenance facilities are presented in DEIR Section 4.8, *Noise*. Further detail on the reference noise levels, principal modeling assumptions and impact analyses for Option L and Mirror H is available in the maintenance facility noise assessment technical memoranda.[5,6] The full noise analysis for Yard 8 was conducted for and included in the DEIR/EA.

The proposed maintenance facility would introduce new noise sources into the surrounding areas and would contribute to the future noise exposure conditions at sensitive receptors. Potential noise impact has been assessed at sensitive receptors near Yard 8, Option L and Mirror H including the Brickbottom Artists Building (northeast and southwest sides), the Hampton Inn Hotel, the Glass Factory Condominiums and NorthPoint Development properties. Based on the current NorthPoint development plan, eight sites have been assumed to be noise-sensitive including the existing Tango and Sierra residential properties and future planned properties shown in Figure 3-6 (Site 1, Site 2, Site 3, Site 4, Site 5 and a park).

Potential noise impact is assessed by comparing the existing noise conditions with future conditions. Existing noise conditions were measured at four locations near

4 Federal Transit Administration. *Transit Noise and Vibration Impact Assessment* (Report FTA-VA-90-1003-06). May 2006.

5 Harris Miller Miller & Hanson Inc., *Option L Maintenance Facility Noise and Vibration Assessment*, April 2010.

6 Harris Miller Miller & Hanson Inc., *Mirror H Maintenance Facility Noise and Vibration Assessment*, April 2010.

these sensitive properties. A summary of the measurement sites and results is shown in Table 3-1 and the measurement locations are shown in Figures 3-1 through 3-3. Short-term measurement site ST-1 was conducted on the northeast side of the Hampton Inn Hotel and is representative of the existing noise conditions on the northeast sides of the Glass Factory Condos, the Hampton Inn Hotel and the Brickbottom Artists Building. Short-term measurement site ST-2, on the southwest side of the Brickbottom Artists Building, is representative of the existing noise conditions for the southwest side of the Brickbottom Artists Building. The dominant noise source at ST-2 is commuter train activity on the MBTA Fitchburg Line. Short-term measurement site ST-8, at the end of Water Street, is representative of existing noise conditions at the five future NorthPoint properties and the park. Long-term measurement site LT-10, on the southwest side of the Glass Factory Condos, is representative of the existing noise conditions at the existing Tango and Sierra NorthPoint properties (adjusted for relative distances to O'Brien Highway).

Table 3-1 Existing Noise Measurement Results

Measurement Site	Location	Existing Day-Night Average Sound Level (Ldn)	Existing Peak-Transit Hour Sound Level (Leq)	Commuter Train Noise Level (Lmax)[d]	Distance to Near Track (feet)
ST-1	Water Street (Cambridge) – Hampton Inn Hotel (northeast side of building)	58[b]	60	n/a	n/a
ST-2	Fitchburg Street (Somerville) – Brickbottom Artists Building (southwest side of building facing Fitchburg Line)	64[a]	61	78	65[c]
ST-8	End of Water Street between O'Brien Highway and Boston Engine Terminal	62[b]	65	n/a	n/a
LT-10	Glass Factory Condominiums [c] (southwest side of building)	65	63	n/a	n/a

Source: HMMH, 2010 & 2008 and Lechmere Station Relocation Project (November, 2006).
a Ldn estimated by comparing SEL levels of train events to long-term sites whose noise environment is dominated by train noise.
b Ldn estimated according to FTA guidance for short-term measurements conducted between 7 AM and 7 PM.
c Measurement conducted March, 2006 and reported in Environmental Assessment for the Lechmere Station Relocation Project (November, 2006).

Future noise sources associated with the Project include mainline Green Line operations, MBTA commuter train operations (southwest side of Brickbottom Artist Building only) and maintenance facility noise sources. Maintenance facility noise sources include train movements in and out of the yards, increases in noise from special trackwork (crossovers or turnouts), potential wheel squeal on tight radius curves, stationary cars in the yards operating with auxiliary equipment on, the traction power substation, and the employee parking lot.

Train movements in and out of the yards are non-revenue operations between the proposed yards to and from the closest stations (Union Station, Lechmere Station and Brickbottom Station). These "pull in" and "pull out" movements are required to bring trains into service or to take trains out of service for maintenance or at the end of the service day. These movements are in addition to the standard revenue service train operations. Often these additional train movements represent the most significant noise source associated with the maintenance facilities.

Maintenance lead tracks and yard tracks often include special trackwork (crossovers or turnouts) or tight-radius curves which can increase noise levels associated with train movements into and out of the yards. Special trackwork introduces gaps into the rail running surface which will increase noise levels from the train as the wheels impact these gaps. Tight-radius curves, typically 400-foot radius or less, may cause wheel squeal which is a high-frequency tonal noise generated by the wheels. Another potentially significant noise source associated with the maintenance facilities are stationary cars in the storage yards operating with auxiliary equipment on. Cars are typically operated under this condition in the early morning to heat or cool the interior and prepare the trains for revenue service as well as at other times during the day when cars are in the yards but will be required to return to service. The contribution of noise from such operation of cars in the storage yards is generally not as significant as the train movements unless receptors are much closer to the storage yards than the mainline tracks.

Maintenance operations within the building such as wheel truing, using pneumatic tools and the car wash are not expected to be significant noise sources in the community as the building will shield these activities. The heating ventilation and air-conditioning (HVAC) system for the maintenance building is also not expected to be a significant noise source. Unlike maintenance buildings for diesel-electric locomotives which require more substantial HVAC systems to handle the train exhaust, this building would only require normal levels of airflow for storing electric Green Line vehicles.

Table 3-2 presents a summary of the potential noise impact at sensitive receptors near the proposed maintenance facilities prior to mitigation. This table shows the results for Yard 8, Option L and Mirror H. Potential noise impact locations for the three alternatives are also shown in Figures 3-4 through 3-6. This table includes the sensitive receptors, which side of the tracks it is on, the future distances between the receptor and the near track centerlines of the mainline Green Line and MBTA Fitchburg commuter line, the existing noise condition (Ldn), the moderate and severe impact criteria, the contribution of noise from mainline operations, the contribution from maintenance facility noise sources, the future noise level (which include maintenance facility, mainline operations and existing noise sources), the increase in noise between the existing and future conditions and whether the potential impact would be moderate or severe.

At the Brickbottom Artists Building, Hampton Inn Hotel, Glass Factory Condominiums and NorthPoint properties, noise barriers may not be a feasible or effective means of mitigation. Since these buildings have upper-floor residences that may not benefit from a potential noise barrier and most properties do not have outdoor land use, sound insulation mitigation and/or potential noise barriers will be considered during the preliminary engineering phase of the Project.

Table 3-2 Potential Project Noise Impact at Sensitive Receptors (Prior to Mitigation)

Noise Sensitive Receptor Location	Side of Tracks	Distance to Near Track (feet)		Existing Noise Level (Ldn)	Impact Criteria		Future Noise Level from Mainline (Ldn)	Future Noise Level from Yard Sources (Ldn)	Total Future Noise Level (Ldn)[a]	Increase	Total Number of Impacts (buildings)	
		Comm.	Green Line		Mod.	Sev.					Mod.	Sev.
Maintenance Facility - Yard 8												
Brickbottom Artists Building (northeast façade)	West	n/a	18	57.6	60.0	63.5	75.3	69.9	76.4	18.8		1
Brickbottom Artists Building (southwest façade)	West	88	n/a	64.1	65.5	67.9	67.9	59.9	69.9	5.8		-- [b]
Hampton Inn Hotel (northeast façade)	West	n/a	41	57.6	60.0	63.5	66.8	57.3	67.7[c]	10.1		1
Glass Factory Condos (northeast façade)	West	n/a	43	57.6	60.0	63.5	70.0	56.9	70.4[c]	12.8		1
NorthPoint Properties (Tango and Sierra)	East	n/a	109	61.0	62.8	65.6	60.5	n/a[d]	63.8	2.8	2	
Total noise impacts prior to mitigation for Yard 8											*2*	*3*
Maintenance Facility - Option L												
Brickbottom Artists Building (northeast façade)	West	n/a	18	57.6	60.0	63.5	75.3	69.9	76.4	18.8		1
Brickbottom Artists Building (southwest façade)	West	88	n/a	64.1	65.5	67.9	67.9	60.5	69.9	5.8		-- [b]
Hampton Inn Hotel (northeast façade)	West	n/a	41	57.6	60.0	63.5	66.8	57.8	67.8	10.2		1
Glass Factory Condos (northeast façade)	West	n/a	43	57.6	60.0	63.5	70.0	57.3	70.5	12.9		1
NorthPoint Properties (Tango and Sierra)	East	n/a	109	61.0	62.8	65.6	60.5	n/a[d]	63.8	2.8	2	
Total noise impacts prior to mitigation for Option L											*2*	*3*
Maintenance Facility - Mirror H												
Brickbottom Artists Building (northeast façade)	West	n/a	18	57.6	60.0	63.5	79.2[d]	69.9[e]	80.9	23.3		1
Brickbottom Artists Building (southwest façade)	West	88	n/a	64.1	65.5	67.9	67.9	56.2	69.6	5.5		-- [b]
Hampton Inn Hotel (northeast façade)	West	n/a	41	57.6	60.0	63.5	66.8	58.8	67.9	10.3		1
Glass Factory Condos (northeast façade)	West	n/a	43	57.6	60.0	63.5	70.0	57.5	70.5	12.9		1
NorthPoint Properties (Tango and Sierra)	East	n/a	109	61.0	62.8	65.6	60.5	54.7[e]	64.3	3.3	2	
NorthPoint Properties Site 1	East	n/a	300	61.5	63.2	66.0	50.7	66.4[f]	67.7	6.2		1
NorthPoint Properties Site 2	East	n/a	300	61.5	63.2	66.0	49.9	66.5[f]	67.8	6.3		1
NorthPoint Properties Site 3	East	n/a	500	61.5	63.2	66.0	51.1	64.8[f]	66.6	5.1		1
NorthPoint Properties Site 4	East	n/a	700	61.5	63.2	66.0	48.7	65.1[f]	66.8	5.3		1
NorthPoint Properties Site 5	East	n/a	700	61.5	63.2	66.0	48.7	58.5[f]	63.4	1.9	1	
Total noise impacts prior to mitigation for Mirror H											*3*	*7*

Source: HMMH, August 2010.
a Total future noise level includes future mainline noise, future yard noise sources and existing noise sources.
b Brickbottom Artists Building impact is counted under listing for Brickbottom Artists Building (northwest).
c Future noise level reported in DEIR for this receptor does not include yard noise sources.
d Receptor does not have significant contribution from yard noise sources.
e Noise includes contribution from crossover in front of building.
f Most significant yard noise source is stationary vehicles operating with auxiliary equipment running.

During the next phase of Project development, the existing outdoor-to-indoor noise reduction of the buildings will be measured and interior noise levels will be assessed against applicable interior noise criteria (the current analysis is based on outdoor noise levels and an outdoor criterion assessed at the closest sides of these buildings). The FTA specifies that maximum interior noise levels from transit sources (excluding horns) should be 65 dBA or lower. In addition to this maximum criterion, potential impact in interior spaces will be assessed against an interior criterion Ldn of 45 dBA from transit sources.

Substantial improvements in building sound insulation (on the order of five to 10 dBA) can often be achieved by adding an extra layer of glazing to windows, by sealing any holes in exterior surfaces that act as sound leaks, and by providing forced ventilation and air conditioning so that windows do not need to be opened. Sound insulation would be considered an effective mitigation measure if it is possible to improve the noise reduction of the existing building by five decibels or more. The FTA generally considers sound insulation mitigation a reasonable expenditure if it can be effective at a cost of $25,000 to $30,000 per residence.

3.3.1 Yard 8

A total of two buildings would be exposed to moderate impact and three buildings would be exposed to severe noise impact prior to mitigation for Yard 8. Future noise conditions are primarily a function of the mainline train operations and maintenance facility noise sources only increase future noise levels a relatively small amount. Future noise levels from all yard sources are five to 13 decibels lower than noise from mainline operations. As an example of the effect of maintenance facility noise sources, future noise from mainline operations at the northeast façade of the Brickbottom Artists Building would be Ldn 75.3 dBA and noise from the maintenance facility operations would be Ldn 69.9 dBA. The future noise level would be Ldn 75.3 dBA without any contribution from the maintenance facility and would be Ldn 76.4 dBA including the maintenance facility. Therefore, the Yard 8 maintenance facility would only increase future noise levels by 1.1 decibel compared to the mainline operations alone (which is not perceptible to humans). At the other receptors potentially impacted under Yard 8 (Hampton Inn, Glass Factory Condominiums and two existing NorthPoint properties Tango and Sierra), the contribution of noise from maintenance facility operations is even less than at Brickbottom Artists Building.

3.3.2 Option L

The noise impact assessment results for Option L are very similar to the results for Yard 8. A total of two buildings would be exposed to moderate impact and three buildings would be exposed to severe noise impact prior to mitigation for Option L. Future noise conditions are primarily a function of the mainline train operations and maintenance facility noise sources only increase future noise levels a relatively small amount. Future noise levels from all yard sources are five to 13 decibels lower than

noise from mainline operations. Noise from train movements in and out of the yard at Option L would be slightly higher at the southwest façade of the Brickbottom Artists Building than Yard 8 due to the presence of a tight radius curve on the Medford Lead track. Noise from train movements in and out of the yard at Option L would be slightly higher at the Hampton Inn Hotel and the Glass Factory Condos due to stationary cars in the south yard operating with auxiliary equipment on.

As an example of the effect of maintenance facility noise sources, future noise from mainline operations at the northeast façade of the Brickbottom Artists Building would be Ldn 75.3 dBA and noise from the maintenance facility operations would be Ldn 69.9 dBA. The future noise level would be Ldn 75.3 dBA without any contribution from the maintenance facility and would be Ldn 76.4 dBA including the maintenance facility. Therefore, the Option L maintenance facility would only increase future noise levels by 1.1 decibel compared to the mainline operations alone (which is not perceptible to humans). At the other receptors potentially impacted under Option L (Hampton Inn, Glass Factory Condominiums and two existing NorthPoint properties Tango and Sierra), the contribution of noise from maintenance facility operations is even less than at Brickbottom Artists Building.

3.3.3 Mirror H

For Mirror H, a total of three buildings would be exposed to moderate impact and seven buildings exposed to severe impact prior to mitigation. The relative contribution of noise from maintenance operations versus mainline operations is similar to Yard 8 and Option L at the Brickbottom Artists Building, Hampton Inn and Glass Factory Condominiums with this alternative. Noise from train movements in and out of the yard and mainline operations would be higher at the northeast façade of the Brickbottom Artists Building for Mirror H than Yard 8 or Option L due to the presence of a double crossover and a turnout between the northbound mainline and the maintenance lead track directly in front of the building. For the existing NorthPoint properties, Tango and Sierra, future noise conditions also depend primarily on the mainline operations. For the future planned NorthPoint properties (Sites 1 to 5), which are more set back from the mainline (300 to 700 feet) and are closer to the Mirror H storage yards, future noise conditions depend primarily on the stationary cars operating in the yards with auxiliary equipment running.

It is assumed that future properties at the NorthPoint development would have noise-sensitive receptors at upper-floor residences, which would not benefit from a noise barrier for potential mitigation. Since the proposed development is not currently under construction and is assumed to be completed by 2030, after the completion of the Green Line Extension Project, the buildings could be designed with consideration of the noise environment (i.e. windows with high transmission loss or sound transmission class [STC] ratings) to mitigate potential impact.

3.4 Vibration

This section documents direct vibration impacts from the three maintenance facility alternatives. The vibration impact analysis for the Green Line Extension Project is based on the methodology defined in the FTA guidance manual *Transit Noise and Vibration Impact Assessment*.[7] Vibration impacts are assessed for maximum levels, as vibration — unlike noise — is not a cumulative metric. To assess the potential effect of the three maintenance facility alternatives for vibration, the maximum vibration levels from both mainline operations and any movements to or from the maintenance facility are reported for all impacted receptors. The FTA criterion for vibration impacts for residential spaces such as the Brickbottom Artists Building is 72 VdB. The FTA impact criterion does not distinguish between "moderate" and "severe" vibration impacts. Figures 3-1 through 3-3 show the vibration study measurement locations. Figures 3-4 through 3-6 show buildings impacted by vibration prior to mitigation.

The proposed maintenance facilities would introduce new vibration sources into the surrounding areas and may cause potential vibration impact prior to mitigation. Potential vibration impact has been assessed at sensitive receptors near the proposed Yard 8, Option L and Mirror H including the Brickbottom Artists Building (northeast and southwest sides), the Hampton Inn Hotel, the Glass Factory Condominiums and NorthPoint Development properties. Based on the current NorthPoint development plan, seven sites have been assumed to be vibration-sensitive including the existing Tango and Sierra residential properties and future planned properties shown in Figure 3-6 (Site 1, Site 2, Site 3, Site 4 and Site 5).

Vibration generated by trains depends on several factors including the speed of the train, the presence of special trackwork (crossovers and turnouts) and whether the track alignment is at-grade or on an aerial structure. Special trackwork introduces gaps into the rail running surface which will increase vibration levels, similar to noise, from the train as the wheels impact these gaps. Although maintenance lead tracks and yard tracks often include special trackwork, these tracks are typically further away from sensitive receptors. An aerial structure reduces vibration significantly (10 VdB) compared to at-grade alignments because the vibration must propagate through the structure to the support columns and then into the ground and into surrounding buildings.

Table 3-3 shows the potential vibration impact prior to mitigation near the proposed maintenance facility alternatives. This table includes the vibration-sensitive receptor, the distance the mainline and yard track centerlines generating the highest levels of vibration, the maximum vibration velocity in any 1/3-octave band between four and 80 Hz for both mainline and maintenance facility movements and the number of buildings impacted. For all three alternatives, the Brickbottom Artists Building is the only receptor projected to be exposed to vibration impact prior to mitigation. For all maintenance facility alternatives, the maximum vibration generated by any yard

7 Federal Transit Administration. *Transit Noise and Vibration Impact Assessment* (Report FTA-VA-90-1003-06). May 2006.

movements is lower than the respective mainline operations. Mirror H is the only alternative projected to have potential vibration impact from yard movements.

As stated in the DEIR/EA, resilient rail fasteners, which are specially-designed fasteners between the rails and the ties, are one option for mitigating potential vibration impact at the Brickbottom Artists Building. Resilient rail fasteners can reduce vibration by five to 10 VdB at frequencies above 30 to 40 Hz. Approximately 500 feet of vibration mitigation along the length of the Brickbottom Artists Building would be effective in mitigating potential vibration impact. During the next phase of the project, vibration measurements will be conducted at additional sensitive locations to refine vibration mitigation recommendations.

Table 3-3 Potential Vibration Impacts at Sensitive Receptors (Prior to Mitigation)

Vibration Sensitive Receptor Location	Side of Tracks	Distance to Track Centerline (feet)		Maximum Vibration Velocity Level in any 1/3-Octave band from 4 to 80 Hz (VdB re: 1 -in.sec)		Total Number of Impacted Buildings
		Green Line Mainline	Green Line Yard Tracks	Green Line Mainline	Green Line Yard Tracks	
Maintenance Facility - Yard 8						
Brickbottom Artists Building (northeast façade)	West	18 [a]	46	77	67	1
Total vibration impacts prior to mitigation for Yard 8						*1*
Maintenance Facility - Option L						
Brickbottom Artists Building (northeast façade)	West	18 [a]	60 [b]	77	71	1
Total vibration impacts prior to mitigation for Option L						*1*
Maintenance Facility - Mirror H						
Brickbottom Artists Building (northeast façade)	West	33 [b, c]	50 [b]	84	75	1
Total vibration impacts prior to mitigation for Mirror H						*1*

Source: HMMH, August 2010.

a Green Line is on elevated structure at this location.

b Increased vibration from special trackwork is included at these locations.

c The maximum vibration generated for this alternative and receptor is from the far mainline track due to the presence of a double crossover.

3.4.1 Yard 8

For Yard 8, the maximum vibration level (77 VdB) at the Brickbottom Artists Building is projected to be generated from trains on the elevated near mainline track approximately 18 feet away. The highest vibration generated by yard movements is 67 VdB. Therefore, no vibration impact is projected at any receptors directly from yard movements for Yard 8.

3.4.2 Option L

For Option L, the maximum vibration level (77 VdB) at the Brickbottom Artists Building is projected to be generated from trains on the elevated near mainline track approximately 18 feet away. The highest vibration generated by yard movements is 71 VdB. Therefore, no vibration impact is projected at any receptors directly from yard movements for Option L.

3.4.3 Mirror H

For Mirror H, the maximum vibration level (84 VdB) at the Brickbottom Artists Building is projected to be generated from trains on the elevated far mainline track approximately 33 feet away because this track includes a double crossover to the maintenance tail track. The maximum vibration generated by yard movements is 75 VdB due to the presence of a double crossover on the maintenance yard tail track approximately 50 feet away from the Brickbottom Artists Building.

3.5 Traffic

This section discusses existing conditions and impacts to automobile traffic and parking operations as a result of each of the three maintenance facility alternatives. Figures 3-1 through 3-3 show the traffic study intersections.

3.5.1 Yard 8

Yard 8 would have no measurable impact to automobile parking or traffic operations. Access to the facilities would be via Washington Street and Inner Belt Road.

Parking Impacts

There is no existing public or private parking supply at Yard 8. Parking for approximately 100 vehicles would be constructed in concert with the Yard 8 facility. These spaces would be available only to MBTA employees serving either the maintenance facility or the Green Line. There would be no impact to the public parking supply. MBTA Lechmere Station parking would also be unaffected.

Traffic Impacts

All MBTA personnel parking at the maintenance facility would arrive and depart outside of the peak commuting hours and would not impact the peak hour vehicular traffic patterns or traffic operations. There would also be no adverse impact to pedestrians or bicyclists in the vicinity of the facility.

3.5.2 Option L

Similar to Yard 8, locating the maintenance facility at Option L would have no measurable impact to parking or traffic operations. No changes to the conceptual design and circulation plan for Brickbottom Station are envisioned under Option L. Access to the Option L maintenance facility would be via Washington Street and Inner Belt Road.

Parking Impacts

There is an existing unused parking lot on 70 Inner Belt Road, which has 97 striped parking spaces available. This unused parking lot would serve as employee parking for Option L. Existing parking spaces along each building would be removed. Similar to the Yard 8 analysis, Option L would have no impact to the public parking supply.

Traffic Impacts

All MBTA personnel parking at Option L would arrive and depart outside of the peak commuting hours and would not impact the peak hour vehicular traffic patterns or traffic operations. There would also be no adverse impact to pedestrians or bicyclists in the vicinity of Option L.

The two existing building uses on the Option L site include a wholesale liquor distribution center and a building temporarily leased as an indoor parking/storage facility for federally confiscated vehicles (formerly occupied by Digital Publishing Company). It is assumed that these buildings and their associated parking would be removed entirely. Since the majority of vehicle trips associated with these buildings occur during the peak hours, there would be a slight reduction in traffic volumes on Washington Street and Inner Belt Road under Option L. Since the reduction is slight and would likely have no noticeable impact on traffic operations, no reduction in peak hour traffic volumes was assumed in the traffic analysis for the Washington Street/Inner Belt Road intersection.

3.5.3 Mirror H

Similar to Yard 8 and Option L, locating the maintenance facility at Mirror H would have no measurable impact on parking or traffic operations. There may be isolated impacts regarding access to/from the facility as discussed further.

Parking Impacts

There is no existing public or private parking supply at the Mirror H site. New parking for approximately 100 vehicles would be constructed in concert with the Mirror H facility. These spaces would be available only to MBTA employees serving either the maintenance facility or the Green Line Extension. Similar to Yard 8 and Option L, Mirror H would have no impact to the public parking supply. MBTA Lechmere Station parking would also be unaffected.

Traffic Impacts

All MBTA personnel parking at Mirror H would arrive and depart outside of the peak commuting hours and would not impact the peak hour vehicular traffic patterns or traffic operations. There would also be no adverse impact to pedestrians or bicyclists in the vicinity of Mirror H.

Access to the Mirror H Facility and Circulation at Lechmere Station

Regional access to Mirror H would be via Monsignor O'Brien Highway. Traffic to/from the north would use Water Street as a connection from O'Brien Highway to the Mirror H facility. Traffic entering the facility from the south would also be provided via O'Brien Highway and Water Street. This requires the existing median along O'Brien Highway to be cut and a traffic signal installed at Water Street. This improvement is currently proposed as part of the relocation of Lechmere Station. Timing of the construction of this improvement could be impacted if access to Mirror H is needed prior to completion of Lechmere Station construction.

To accommodate pedestrians crossing O'Brien Highway at Water Street, no left turns would be allowed out of Water Street. Therefore, traffic exiting the facility would use North First Street to O'Brien Highway southbound. The construction of North First Street is also proposed as part of the relocation of Lechmere Station. As with Water Street, timing of construction could be impacted if access to Mirror H is needed prior to completion of station construction.

In order to provide access to/from all directions, a roadway connection between Water Street and North First Street would be required. This connection could be provided as part of the Lechmere Station construction, or could be a separate private way behind the station until such time that the NorthPoint development is complete and the accompanying roadway infrastructure is constructed in its entirety.

3.6 Socioeconomic Impacts

This section compares the socioeconomic impacts in terms of projected tax effects and job loss for the three maintenance facility alternatives. Two buildings would be purchased and demolished under Option L. All other acquisitions would involve strips of land or vacant lots and would not require building demolition. Table 3-4 lists the current annual property taxes for the areas to be acquired.

Table 3-4 Property Tax Effects of Yard 8, Option L, and Mirror H

Property	Type	Annual Property Taxes on Acquired Area[a, b, c, d]	Estimated Jobs Displaced or Relocated[e]	Acquisition
Yard 8				
200 Inner Belt Road, Somerville	Commercial/industrial building	$80,532.95	0	Partial (undeveloped portion)
0 Inner Belt Road, Somerville	Pan Am Railways track	$35,530.85	0	Full
SUBTOTAL		*$116,063.80*	*0*	
Option L				
20 Third Avenue, Somerville	Commercial/industrial building	$120,420.22	74	Full
44-48 Third Avenue, Somerville	Commercial/industrial building	$138,004.75	0	Full
70 Inner Belt Road, Somerville	Commercial/industrial lot	$30,975.55	0	Partial (parking lot)
200 Inner Belt Road, Somerville	Commercial/industrial lot	$33,039.16	0	Partial (southern Corner)
SUBTOTAL		*$322,439.68*	*74*	
Mirror H				
NorthPoint Development Lot 17/A/2, Somerville	Pan Am Railways track	$56,222.22	0	Partial
NorthPoint Development Lot 1A-102, Cambridge	Pan Am Railways track	$78,411.23	0	Partial
NorthPoint Development Lot 0202190050, Boston	Pan Am Railways track	$2,993.19	0	Partial
SUBTOTAL		*$137,626.64*	*0*	

a Annual property taxes for partial acquisitions are prorated based on the square footage taken from each parcel.
b Somerville Assessor's Office: Fiscal Year 2010 tax rate = $20.44 per $1,000 assessed value (commercial).
c Cambridge Assessor's Office: Fiscal Year 2010 tax rate = $18.75 per $1,000 assessed value (commercial).
d Boston Assessor's Office: Fiscal Year 2010 tax rate = $29.38 per $1,000 assessed value (commercial).
e Jobs estimated based on data from InfoUSA and publicly-available data. Municipal buildings are assumed to relocate within the same city and cause no net change. Vacant buildings are assumed to have no jobs under existing conditions.

Table 3-5 summarizes the annual tax value decreases by city. Somerville would have a annual tax loss of $116,063.80 (0.12 percent of total city revenue) for Yard 8, $322,439.68 (0.33 percent of total city revenue) for Option L and $56,222.22 (0.05 percent of total annual city revenue) for Mirror H. Cambridge and Boston would only experience tax loss under Mirror H, an annual tax loss of $78,411.23 (0.03 percent of total city revenue) and $2,993.19 (0.0002 percent of total city revenue), respectively.

Table 3-6 summarizes the job displacements or relocations for each city. Option L would displace or relocate 74 jobs in Somerville. Many of the jobs displaced would likely be relocated or replaced within Somerville. Cambridge and Boston would lose zero jobs for either maintenance facility alternative selected.

Table 3-5 Property Tax Decreases by City for Yard 8, Option L, and Mirror H

	Somerville		Cambridge		Boston	
Alternative	Tax revenue decrease	% of City total	Tax revenue decrease	% of City total	Tax revenue decrease	% of City total
Yard 8	$116,063.80	0.12	$0	0.00	$0	0
Option L	$322,439.68	0.33	$0	0.00	$0	0
Mirror H	$56,222.22	0.05	$78,411.23	0.03	$2,993.19	0.0002

Table 3-6 Estimated Job Decreases or Relocations for Yard 8, Option L, and Mirror H

Alternative	Somerville	Cambridge	Boston	TOTAL
Yard 8	0	0	0	0
Option L	74	0	0	74
Mirror H	0	0	0	0
Work Force in City	*47,026*	*55,737*	*347,611*	

Source: U.S. Census Bureau, 2006-2008 American Community Survey
(Total work force included to demonstrate scale of impacts.)

3.6.1 Yard 8

The total estimated annual property tax value of the land and buildings acquired for Yard 8 is $116,063.80. These acquisitions would reduce annual property tax revenue by 0.12 percent in Somerville.

Yard 8 would not require the displacement or relocation of any jobs. Table 3-6 summarizes the job displacements or relocations for each city.

3.6.2 Option L

The total estimated annual property tax value of the land and buildings acquired for Option L is $322,439.68. These acquisitions would reduce annual property tax revenue by 0.33 percent in Somerville.

Table 3-6 summarizes the job displacements or relocations for each city. Option L would displace or relocate approximately 74 jobs in Somerville. Many of the jobs displaced would likely be relocated or replaced within Somerville.

This change would not represent a significant fraction of the jobs in Somerville. By comparison, the 2006-2008 U.S. Census estimated the workforce of Somerville at 47,026 workers. Although it is uncertain how many of the jobs displaced under Option L are held by local residents rather than commuters, the small scale of the job displacements relative to the workforce makes it clear that the jobs at stake represent at most a minor economic impact.

3.6.3 Mirror H

The total estimated annual property tax value of the land and buildings acquired for Mirror H is $137,626.64. These acquisitions would reduce annual property tax revenue by 0.05 percent ($56,222.22) in Somerville, 0.03 percent ($78,411.23) in Cambridge and 0.0002 percent ($2,993.19) in Boston. At the time of this analysis, discrepancies in City property limits between Somerville and Cambridge were found and are being reviewed. These annual tax revenue estimates are subject to change based on the resolution of city limits.

Mirror H would not require the displacement or relocation of any jobs.

3.7 Title VI and Environmental Justice

The EEA established an Environmental Justice Policy in 2002, in accordance with Title VI of the Civil Rights Act of 1964, to help address the disproportionate share of environmental burdens experienced by lower-income people and communities of color who, at the same time, often lack environmental assets in their neighborhoods. The policy is designed to help ensure their protection from environmental pollution as well as promote community involvement in planning and environmental decision-making to maintain and/or enhance the environmental quality of their neighborhoods. All major elements of the proposed Green Line Extension Project must meet the standards set forth by this Policy.

The Project must also comply with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, directing federal agencies to address environmental injustices in their operations and in communities across the country. The Executive Order requires that each Federal agency shall, to the greatest extent allowed by law, administer and implement its programs, policies, and activities that affect human health or the environment so as to identify and avoid "disproportionately high and adverse" effects on minority and low-income populations.

The U.S. Department of Transportation (DOT) also established its own policy to actively ensure nondiscrimination under Title VI of the 1964 Civil Rights Act in Federally funded activities, DOT Order on Environmental Justice to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order 5610.2) , which the Project must comply with. DOT Order 5610.2 summarizes and expands on the requirements of Executive Order 12898 and describes the process for incorporating environmental justice principles into all DOT existing programs, policies, and activities. As shown on Figure 3-7, all three maintenance facility alternatives are within designated environmental justice areas, as is much of the overall Green Line Extension Project corridor.

3.7.1 Yard 8

Yard 8 would require acquiring two pieces of land on Inner Belt Road: the existing Yard 8 at 0 Inner Belt Road and an undeveloped area at 200 Inner Belt Road. Like all other maintenance facility sites considered, this site is within a designated environmental justice area. However, no buildings would be acquired or demolished and no residential land would be acquired, resulting in no direct effect on local environmental justice populations.

The proposed maintenance facility site is in an existing industrial area in between the MBTA Fitchburg and Lowell Lines. The noise from the maintenance facility is included in the overall noise analysis presented in DEIR/EA Section 5.7, *Noise*, and in Section 3.3, *Noise*, of this technical memorandum. Potential severe noise impact is projected at the Brickbottom Artists Building, the Hampton Inn Hotel, and the Glass Factory Condos, and potential moderate noise impact is projected at the existing NorthPoint Tango and Sierra properties, prior to mitigation. Noise from the mainline operations is the dominant factor in future noise levels at these receptors.

Sound insulation of residences to improve the outdoor-to-indoor noise reduction is a potential mitigation measure for these existing properties. The need and effectiveness of building sound insulation for interior spaces will be assessed in the next phase of project development. There would be no moderate or severe impacts from noise after mitigation is implemented. With no other residential populations nearby, there would be no disproportionate impact to environmental justice populations due to the Yard 8 maintenance facility.

The building for the maintenance facility would result in a moderate change to the local visual environment by introducing an additional industrial building to this largely commercial/industrial neighborhood. In the absence of the proposed maintenance facility, the site selected may be redeveloped for other uses that would have similar or greater impacts on the local neighborhood. The proposed maintenance facility building site is zoned for industrial use and other related uses.

Overall, the placement of the maintenance facility in an existing industrial district would not result in any substantial changes to the local environment. There would be no disproportionate impact to environmental justice populations due to Yard 8.

3.7.2 Option L

Two buildings would be acquired and demolished as part of Option L. However, no residential land would be acquired, resulting in no direct effect on local environmental justice populations.

Under Option L, 74 jobs would be displaced in an environmental justice area. While the analysis cannot assume that the employees of these businesses are local residents, the local racial makeup and economic status provides the best available indicator for the affected populations. As discussed in Section 3.6, *Socioeconomic Impacts*, of this

technical memorandum, the displacement of these jobs does not represent a substantial economic change for the local area.

The proposed maintenance facility site is in an existing industrial area in between the MBTA Fitchburg and Lowell Lines. The noise from the maintenance facility is included in Section 3.3, *Noise,* of this technical memorandum. Potential severe noise impact is projected at the Brickbottom Artists Building, the Hampton Inn Hotel, and the Glass Factory Condos, and potential moderate noise impact is projected at the existing NorthPoint Tango and Sierra properties, prior to mitigation. Noise from the mainline operations is the dominant factor in future noise levels at these receptors.

Sound insulation of residences to improve the outdoor-to-indoor noise reduction is a potential mitigation measure for these existing properties. The need and effectiveness of building sound insulation for interior spaces will be assessed in the next phase of project development. There would be no moderate or severe impacts from noise after mitigation is implemented. Therefore, there would be no disproportionate environmental justice impacts from the proposed maintenance facility.

The building for the maintenance facility would change the local visual environment slightly by introducing an additional industrial building to this largely commercial/industrial neighborhood.

Overall, the placement of the maintenance facility in an existing industrial district would not result in any substantial changes to the local environment. There would be no disproportionate impact to environmental justice populations due to Option L.

3.7.3 Mirror H

Mirror H would require acquiring partial pieces of land owned by Pan Am Railways and planned for the future NorthPoint development project. However, no buildings would be acquired or demolished, and no residential land would be acquired, resulting in no direct effect on local environmental justice populations.

The proposed maintenance facility site is in an existing industrial area south of the MBTA Fitchburg Line. The noise from the maintenance facility is included in Section 3.3, *Noise,* of this technical memorandum. Potential severe noise impact is projected at the Brickbottom Artists Building, the Hampton Inn Hotel, the Glass Factory Condos, and four future properties in the NorthPoint development (Sites 1, 2, 3 and 4), prior to mitigation, and potential moderate noise impact is projected at one future property in the NorthPoint development (Site 5) and two existing properties (Tango and Sierra). Noise from the mainline operations is the dominant factor in future noise levels at the Brickbottom Artists Building, Hampton Inn Hotel, Glass Factory Condos and existing NorthPoint properties Tango and Sierra. Sound insulation of residences to improve the outdoor-to-indoor noise reduction is a potential mitigation measure for these existing properties. The need and effectiveness of building sound insulation for interior spaces will be assessed in the next phase of project development. There would be no moderate or severe impacts

from noise after mitigation is implemented. Therefore, there would be no disproportionate environmental justice impacts from the proposed maintenance facility.

Noise from Mirror H is the dominant project-related noise source at the five future NorthPoint properties (Sites 1, 2, 3, 4 and 5). It is assumed that future properties at the NorthPoint development would have noise-sensitive receptors at upper-floor residences, which would not benefit from a noise barrier for potential mitigation. Since the proposed development is not currently under consideration and is assumed to be completed by 2030, after the completion of the Green Line Extension Project, the buildings could be designed with consideration of the noise environment (i.e. windows with high transmission loss or STC ratings) to mitigate potential impact.

The building for the maintenance facility would change the local visual environment slightly by introducing an additional industrial building to this largely commercial/industrial neighborhood. In the absence of the proposed maintenance facility, the site selected may be redeveloped for other uses that would have similar or greater impacts on the local neighborhood.

Overall, the placement of the maintenance facility in an existing industrial area would not result in any substantial changes to the local environment. There would be no disproportionate impact to environmental justice populations due to Mirror H.

3.8 Visual Resources

This section compares the direct visual impacts from the three maintenance facility alternatives. The support facility would be an enclosed building, resulting in minimal light exposure to the surrounding area. Any outdoor lighting would be directed downward and towards the building with fixture hoods to prevent any direct lighting impacts at night on neighboring buildings.

Moreover, the aesthetic features of the exterior of the maintenance facility structure would enhance the possibility of quality redevelopment nearby. Heavy visual screening by landscaping or walls would be considered, especially adjacent to the outdoor rail car storage area. Consideration would be given to the development of a deck for parking or other purposes over the storage yard, which would provide weather protection to the Green Line cars while screening the visual impacts.

3.8.1 Yard 8

Yard 8 has been in continuous use as a rail facility since 1835, and train cars would use the layover tracks mostly at night. The support facility building would be directly across the right-of-way from the Brickbottom Artists Building. The building would be easily visible from the east-facing windows of the Brickbottom Artists Building. Given the existing industrial and commercial buildings visible from this

area, the support facility would result in a moderate change to the local landscape by adding a new industrial building.

3.8.2 Option L

Option L is immediately adjacent to the MBTA's BET, on the northwest. Option L is along the southern and southeastern fringe of the existing Inner Belt industrial area. The vehicle storage yard is proposed at the southern end of the Inner Belt Road just north of the MBTA Fitchburg Line on vacant private property and land that is currently an unused parking lot for 70 Inner Belt Road. The maintenance building would be south of Third Avenue and east of the existing building at 70 Inner Belt Road.

A maintenance facility at Option L would require the demolition of two buildings and the construction of a new building. The building would be less visible from the Brickbottom Artists Building than would Yard 8. Given the existing industrial and commercial buildings visible from this area, the support facility would result in a minor change to the local landscape.

3.8.3 Mirror H

Mirror H straddles portions of the NorthPoint site and a portion of MBTA-owned land. This alternative locates the facility at the north side of the proposed NorthPoint development and partly on MBTA land south of the BET, and represents a plan that places new light rail facilities next to existing MBTA Commuter Rail facilities. A support facility in this location would result in some visual changes to the local area. A single storage yard would be in Cambridge to the west of the maintenance building in Somerville. Some of the auto parking, as well as the tail tracks and loop east of the maintenance building, would be in Boston.

The support facility building would be directly across the right-of-way from the proposed NorthPoint buildings. The building would be easily visible from the northern-facing windows of the proposed NorthPoint buildings. Given the existing industrial (MBTA's BET facility) and commercial buildings visible from this area, the support facility would result in a minor change to the local landscape by constructing a new building.

3.9 Wetlands

There are no state- or Federally-regulated wetlands within the Yard 8, Option L, or Mirror H sites. Therefore, there would be no wetland impacts created by developing any chosen maintenance alternative.

3.10 Stormwater Management

The proposed maintenance facility would be constructed in previously-developed areas and would be designed to meet the Massachusetts Stormwater Management Standards for redevelopment. Maintenance activities (such as light rail vehicle washing) would be conducted inside the maintenance building and are anticipated to contribute to stormwater. Stormwater from the site would discharge to an existing storm drain system and would not discharge directly to any wetlands.

The MBTA would need to apply for coverage under the EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) for the maintenance facility.[8] This general permit requires numerous control measures and operational plans to control spills, manage potential contaminant sources, and prevent the impairment of any water bodies receiving runoff from industrial facilities.

A new EPA National Pollutant Discharge Elimination System (NPDES) permit for an industrial use would be required. This permit would require a new Stormwater Pollution Prevention Plan (SWPPP) to address maintenance and monitoring and a Spill Prevention, Control, and Countermeasures (SPCC) plan to demonstrate vigilance and preparedness for hazardous spills. The storage tracks would have collection trays to catch any incidental drips, leaks, or spills of hazardous materials that may occur during storage or maintenance. The collection trays would be connected to an oil/water separator that would separate petroleum products from stormwater runoff prior to discharge. Any oil or other hazardous materials stored at the site would be secured with secondary containment structures to catch any spills. With the proposed containment measures in place, the storage and maintenance facility would not pose a significant risk to any surface or groundwater resources in the vicinity of either site.

3.10.1 Yard 8

Yard 8 would add 2.6 acres of impervious surfaces to the site. Approximately 54 percent of the new total impervious area (approximately 2.7 acres) would be roof area, which is expected to be clean. The stormwater management system would include many of the same features found in the station and railway drainage. Proposed management measures include:

- Deep sump catch basins to collect runoff from paved areas;
- Hydrodynamic particle separators to treat pavement runoff;

8 The Multi-Sector General Permit for Stormwater Discharges (MSGP) is part of the National Pollutant Discharge Elimination System (NPDES), which requires permits for various stormwater and industrial discharges in order to prevent the contamination and impairment of receiving waters. The EPA is responsible for issuing NPDES permits in Massachusetts, and the permits are also reviewed by MA DEP. The MSGP covers most types of industrial discharges and requires general control measures as well as specific measures tailored to specific industrial uses. Industrial facilities applying for coverage under the MSGP must demonstrate compliance with all requirements and submit copies of their SWPPPs and SPCCs for review.

- Roof drains from building connected to an underground pipe storm drainage system;
- Underground infiltration chambers to store and infiltrate runoff; and
- Overflow outlets from the infiltration chambers to direct excess flow into the municipal storm drainage system in Inner Belt Road.

The stormwater system would be designed to ensure no net increase in peak flow to the existing municipal drain line in Inner Belt Road.

3.10.2 Option L

Option L would reduce existing impervious surfaces by about 3.2 acres. Approximately 40 percent of the new total impervious area (approximately 3.4 acres) would be roof area, which is expected to be clean. The stormwater management system would include many of the same features found in the station and railway drainage. Proposed management measures include:

- Deep sump catch basins to collect runoff from paved areas;
- Hydrodynamic particle separators to treat pavement runoff;
- Roof drains from building connected to an underground pipe storm drainage system;
- Underground infiltration chambers to detain and infiltrate runoff; and
- Overflow outlets from the detention chambers to direct excess flow into the existing MBTA Fitchburg Line Main Drain, which crosses the eastern portion of this site.

The stormwater system would be designed to ensure no net increase in peak flow to the existing MBTA drain line.

3.10.3 Mirror H

Mirror H would reduce existing impervious surfaces (pavement) by about 0.4 acres. Approximately 47 percent of the new total impervious area (approximately 2.2 acres) would be roof area, which is expected to be clean. The stormwater management system would include many of the same features found in the station and railway drainage. Proposed management measures include:

- Deep sump catch basins to collect runoff from paved areas;
- Hydrodynamic particle separators to treat pavement runoff;
- Roof drains from building connected to an underground pipe storm drainage system;

- Underground storage chambers to detain runoff;
- Underground filtration basin to provide additional TSS removal (in lieu of infiltration; and
- Overflow outlets from the detention chambers to direct excess flow into the existing MBTA Fitchburg Line Main Drain, which crosses the eastern portion of this site.

Infiltration is not advised, as there is ongoing groundwater remediation in this area. The stormwater system would be designed to ensure no net increase in peak flow to the existing MBTA drain line.

3.11 Hazardous Materials

This section discusses the potential presence of oil and/or hazardous materials (OHM) on or adjacent to the proposed maintenance facility alternatives for the proposed Green Line Extension Project.

To assess the potential for encountering OHM, Phase I Environmental Site Assessments (ESAs) were performed as per the American Society for Testing Materials (ASTM) 1527-05 Standard and All Appropriate Inquiries (AAI) pursuant to 40 CFR Part 312. The purpose of the Phase I ESAs is to identify Recognized Environmental Conditions (RECs) in connection with the properties, to the extent feasible pursuant to the process described in the Standard. The Phase I ESAs were completed utilizing the Standard as guidance. The scope of services provided for the Phase I ESAs included the following:

- Performed a computer database search of Federal and state files. The Federal databases included the current Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), National Priorities List (NPL), Resource Conservation and Recovery Act (RCRA) Transportation, Storage and Disposal (TSD), RCRA Generators, and Emergency Response Notification System (ERNS) list. The state databases included the state equivalent CERCLIS list, spills, Underground Storage Tanks (USTs), Solid Waste Landfills (SWL), and public water supply lists.
- Reviewed available Massachusetts Department of Environmental Protection (MassDEP) files to provide more information about reported releases of OHM identified through the database search on or adjacent to the sites. The MassDEP files provided additional information regarding past ownership; historic site usage; past usage, storage and disposal of OHM on and adjacent to the subject site; and other evidence of potential environmental impacts.
- Reviewed available municipal and historic files to help confirm ownership history and past usage. Resources included tax records, aerial photographs, Board of Health Department records, Building Department records, Fire

Department records, Conservation Commission records, and Sanborn fire insurance maps. The site history review also identified reports of historic spills, disposal areas, or other past releases of OHM on or adjacent to the properties.

- Reviewed previous site documents including an ESA, if applicable and/or available for review.
- Performed a partial site reconnaissance from public roadways to observe each site for overt evidence of a release or threat of release of oil and/or hazardous materials within exterior portions of the entire property. The uses of abutting properties were also documented. No interior inspections were conducted.
- Areas of property acquisition were assessed as discussed above. Properties already owned by the MBTA or the Commonwealth of Massachusetts were not assessed. Notable deviations from the standard include not inspecting interior portions of buildings, interviews with knowledgeable personnel were not conducted, and a user questionnaire was not completed.

The findings of the Phase I Environmental Site Assessments conducted for the three maintenance facility alternatives indicate that all of the proposed maintenance facilities encompass and abut sites of known and suspected OHM contamination. All three alternatives would likely be impacted by fill material present throughout the area, the historic use of the properties for railroad operations, present industrial use of the property, and several documented disposal sites detailed below. Asbestos containing materials (ACM) and/or lead-based paint may be present in site structures or fill piles in the location of the proposed maintenance facilities; therefore, a detailed survey is recommended prior to acquisition or demolition.

The purpose of this analysis was to identify and compare the number of RECs in connection with each maintenance facility site. RECs that are deemed to have a high potential impact consists of sites such as those confirmed with soil, groundwater, and/or indoor air impacts that were reported to the MassDEP and have undergone some type of cleanup or remain an active case. RECs that are deemed to have a medium potential impact consist of properties such as those with potential sources of OHM with limited or inconclusive information.

It is recommended that upon selection of the preferred maintenance facility site, that subsequent investigation be conducted to identify specific contaminants and associated clean-up costs. On-site contamination encountered would be assessed and, if necessary, remediated prior to and during construction activities. Any necessary response actions would be performed in accordance with the Massachusetts Contingency Plan (MCP).

3.11.1 Yard 8

Based upon the research review conducted for the Phase I ESA, seven RECs are believed to be associated with Yard 8 (off-site releases were consolidated into one REC), comprised of the properties identified in Table 3-7.

Table 3-7 RECs and Potential Impacts for Yard 8

Station/Facility	REC(s)	RTN(s)	Relative Impact
Maintenance Facility	Historic Use of Site at Rail Yard (all Yard 8 parcels)	Not applicable	Medium
	Releases of Petroleum at Nearby Properties (all Yard 8 parcels)	See below[a]	Medium
	Releases of Hazardous Materials (Metals, PCBs, and Unknown Chemicals) at Nearby Properties	See below [b]	Medium
	Release of Petroleum at 100 Inner Belt Road and Petroleum Storage at 70 Inner Belt Road (Currently a portion of the same parcel)	RTN 3-974	Medium
	Release of Arsenic and PCBs at 120 Inner Belt Road	RTN 3-19075	Medium
	Releases of Petroleum at and Current use of MBCR Maintenance Facility at 70R Third Avenue	See below[c]	Medium
	Releases at Yard 8 (Phosphorous trichloride, PCBs, and petroleum)	RTN 3-4222	High

a RTN 3-11444, 3-13082, 3-23562, 3-21316, 3-13535, 3-11570, 3-18392, 3-13854 , 3-11570
b RTN 3-23246, 3-3364, 3-13471, 3-16583, 3-2312, 3-2534
c N90-1956, N90-0236, N90-1810, N93-0627, N93-0705, RTNs 3-24428, 3-22276, 3-26988, 3-22964, 3-23114, 3-18363

3.11.2 Option L

Based upon the research review conducted for the Phase I ESA, seven RECs are believed to be associated with Option L, comprised of the properties identified in Table 3-8.

Table 3-8 RECs and Potential Impacts for Option L

Station/Facility	REC(s)	RTN(s)	Relative Impact
Maintenance Facility	Historic Use of Site as Railroad Yard (all Option L parcels)	Not applicable	Medium
	Use of 48 Third Avenue as a Printing Facility	Not applicable	Medium
	Release of Petroleum at 100 Inner Belt Road and Petroleum Storage at 70 Inner Belt Road (Currently same parcel)	RTN 3-974	High
	Former Condition of 140-200 Inner Belt Road	Not applicable	Medium
	Release of Arsenic and PCBs at 120 Inner Belt Road	RTN 3-19075	Medium
	Releases at Yard 8 (Phosphorous trichloride, PCBs, and petroleum)	RTN 3-4222	High
	Releases of Petroleum at and Current use of MBCR Maintenance Facility at 70R Third Avenue	See below[a]	Medium

a N90-1956, N90-0236, N90-1810, N93-0627, N93-0705, RTNs 3-24428, 3-22276, 3-26988, 3-22964, 3-23114, 3-18363

3.11.3 Mirror H

Based upon the research review conducted for the Phase I ESA, six RECs are believed to be associated with Mirror H, comprised of the properties identified in Table 3-9.

Table 3-9 RECs and Potential Impacts for Mirror H

Station/Facility	REC(s)	RTN(s)	Relative Impact
Maintenance Facility	Historic Use of Site as Railroad Yard (all Mirror H parcels)	Not applicable	Medium
	Fill Material Associated with Millers River (all Mirror H parcels)	Not applicable	Medium
	Current Condition of the Site	Not applicable	Medium
	Release of Petroleum at MBTA Commuter Rail maintenance facility, 29 East Street	RTN 3-2534	High
	Releases of Petroleum at and Current use of MBCR maintenance facility at 70R Third Avenue	See below[a]	Medium
	Releases at the former B&M Railroad Yard (now Pam Am Railways)(all Mirror H parcels)	RTN 3-12277 and RTN 3-11533	High

a N90-1956, N90-0236, N90-1810, N93-0627, N93-0705, RTNs 3-24428, 3-22276, 3-26988, 3-22964, 3-23114, 3-18363

3.12 Historic and Archaeological Resources

The Green Line Extension Project Area of Potential Effects (APE) for historic resources includes the area extending approximately 125 feet, or one assessor's lot, on either side of the Proposed Project's Medford and Union Square Branch routes, associated proposed station locations, and maintenance and/or interim train storage facilities.

The APE for historic resources, in accordance with 36 CFR 800.16(d) is defined as "the area or areas within which an undertaking may directly, indirectly, or cumulatively cause changes in the character or use of historic properties (defined as resources listed or eligible for listing in the National Register), if any such properties exist there."[9] Therefore, the APE includes other areas where the undertaking could cause changes in land use, traffic patterns, or other aspects that could affect historic properties. Factors with potential to cause changes are noise, vibration, visual (setting), traffic, atmospheric, construction, indirect, and cumulative impacts. Different project factors may produce more than one APE for a given undertaking.

The APE for archaeological resources is limited to the construction areas for the proposed maintenance facility alternatives.

There are no historic resources or recorded archaeological sites located within the APE for any alternative site. However, the presence of deeply buried archaeologically sensitive strata below the railroad and modern fill soils is

9 Advisory Council on Historic Preservation. United States 36 Code of Federal Regulations, Part 800 – *Protection of Historic Properties.* http://www.achp.gov/regs-rev04.pdf.

considered possible at all of the proposed maintenance facility alternatives. Further research including a review of soil borings is recommended prior to construction to determine if archaeologically sensitive strata may be impacted by the construction of the maintenance facility.

3.13 Public Parks, Recreation Areas, and Conservation Land

There are no public parks, recreation areas or conservation land areas within or adjacent to the proposed Yard 8, Option L, or Mirror H maintenance facility areas; therefore, there would be no impacts to parks or conservation land.

3.14 Section 4(f) Resources

A historic and archaeological resources reconnaissance survey for the Green Line Extension Project was undertaken as the first step in fulfilling compliance responsibilities regarding cultural resources under Section 4(f) provisions of the U.S. Department of Transportation (DOT) Act of 1966,[10] as well as Section 106 of the National Historic Preservation Act (NHPA) and the regulations of the Advisory Council on Historic Preservation at 36 CFR 800. The FTA is the lead Federal agency for the Green Line Extension Project. MassDOT serves as the lead state agency and is responsible for identifying and evaluating properties through archaeological and historic architectural surveys.

Section 4(f) of the DOT Act of 1966, as amended in 1983 and 2008, specifies that the Secretary of the DOT may approve a transportation program or project requiring the use of publicly-owned land (such as a park, recreation area, or wildlife or waterfowl refuge) or land of an historic site of national, state, or local significance (as determined by federal, state, or local officials having jurisdiction over the park, recreation area, refuge, or site) only if:

- There is no feasible and prudent alternative to the use of land from the property; and
- The action includes all possible planning to minimize harm to the property resulting from the use.

Use is defined as the permanent incorporation of land from a Section 4(f) site into a transportation facility, temporary occupancy of a Section 4(f) property, or constructive use of a Section 4(f) property. For example, the acquisition of land that is within a public park, recreation area, wildlife refuge, or property listed on or eligible for listing on the National Register, for a highway right-of-way is considered permanent incorporation of land. At this time, MassDOT does not anticipate that

10 Section 4(f) provisions of the U.S. Department of Transportation Act of1966, recodified at 49 U.S.C., Subtitle I, Section 303(c).

Section 4(f) uses that are "temporary occupancy of land" would occur during construction as a result of the need for temporary construction easements or activities. These would be identified during the final design process, and are not defined at this conceptual stage of project development. MassDOT anticipates that the final design for the maintenance facility would avoid temporary occupancy of any Section 4(f) site.

There are no Section 4(f) resources (park, recreation area, wildlife/waterfowl refuge, or land of an historic site of national, state, or local significance) within or adjacent to the proposed maintenance facility sites. Section 4(f) also applies to archaeological sites that are on or eligible for inclusion on the National Register and that warrant preservation in place. There is the potential for archaeologically-sensitive strata below railroad and upper fill deposits at all the proposed maintenance facility alternatives that would be impacted by construction of the chosen alternative. However, no archaeological sites within the proposed maintenance facility alternatives have been listed as eligible for, or on, the National Register.

3.15 Consistency with Federal, State, and Local Planning

This section compares the consistency and compatibility of each maintenance facility site to other planned federal, state and local planning initiatives. Figures 3-1 through 3-3 show the existing land uses in the vicinity of the maintenance facility alternatives, and Figure 3-8 shows a generalized zoning map for the communities of Cambridge and Somerville.

Yard 8 and Option L would be compatible locations for the maintenance facility because these alternatives are in the middle of an industrial area. Option L would likely have the least transit oriented development (TOD) potential since it is the farthest away from proposed stations. Option L, in terms of future land use impacts, would likely be the most consistent with local development plans. Mirror H would be less compatible with state and local planning initiatives.

3.15.1 Yard 8

Yard 8 is compatible with the potential future Urban Ring project, the Somerville Community Path, and the North-South Rail Link project. Yard 8 within the City of Somerville is zoned Industrial A (IA).

The proposed vehicle maintenance building and overnight rail car storage area are compatible with much of the existing industrial land uses along this segment of the railroad corridor. However, its development character and impacts may potentially affect future non-industrial development opportunities in adjacent areas.

The facility would be similar in appearance to other MBTA maintenance facilities serving the Green Line (e.g., Riverside and Reservoir). To encourage planned mixed use development near the Brickbottom Station and in the Inner Belt area, consistent

with City of Somerville planning policies for the area, mitigation measures may be necessary. The design of an aesthetic building facade, the enabling of potential air rights development (perhaps through zoning amendments), and dense screening landscaping may be necessary to create a more compatible facility with future non-industrial land uses.

3.15.2 Option L

Option L does not preclude the potential future Urban Ring project, the Somerville Community Path, or future North-South Rail Link project. Option L within the City of Somerville is zoned Industrial A (IA).

The vehicle maintenance building and overnight rail car storage area are compatible with much of the existing industrial land uses along this segment of the railroad corridor. However, its development character and impacts may potentially affect future non-industrial development opportunities in adjacent areas.

The facility would be similar in appearance to other MBTA maintenance facilities serving the Green Line (e.g., Riverside and Reservoir). To encourage planned mixed use development near the Brickbottom Station and in the Inner Belt area, consistent with City of Somerville planning policies for the area, mitigation measures may be necessary. The design of an aesthetic building facade, the enabling of potential air rights development (perhaps through zoning amendments), and dense screening landscaping may be necessary to create a more compatible facility with future non-industrial land uses.

3.15.3 Mirror H

Mirror H does not preclude the potential Urban Ring and Somerville Community Path projects. However, Mirror H could preclude the future North-South Rail Link project and the future expansion planned for the BET facility, both of which are programmed within the MBTA"s existing property limits. The portion of Mirror H within Somerville is zoned Industrial B (IB). The portion of Mirror H within Cambridge is designated as zoned NorthPoint Residence District PUD (NP PUD-6). Zoning in the NorthPoint District is primarily residential, with retail, office uses and community services. The land in Boston that is adjacent to the proposed NorthPoint Development is zoned as a Local Industrial Subdistrict (LI). Mirror H would be less compatible to local planning initiatives than Option L or Yard 8 as the industrial use of this facility would be adjacent to a lot of zoned residential developments.

Most of the underused land between the Mirror H site and the proposed relocated Lechmere Station site, however, is already programmed as part of the NorthPoint development project, which is projected to occupy 46.3 acres and 20 buildings when completed. Full build-out of these developments would be made more attractive by construction of the Green Line Extension, which would make the area more accessible to a larger region.

Farther east and adjacent to the NorthPoint project is the Charles E. Smith/Archstone residential development. Phase I, which includes 437 rental units, was completed in 2007. Phase II is permitted for 426 units. Construction had not yet begun on Phase II as of March 2010.

Directly adjacent to Mirror H is the 2.4 acre site for a 392 unit triple-tower residential/parking/open space project proposed by Catamount Holdings. The development would occupy the vacant site of the former headquarters of the Mac Gray Company at 22 Water Street, behind the Hampton Inn Hotel on O'Brien Highway. The project has been approved by the Cambridge Planning Department.

Additional land use impacts in the station area are uncertain, as there are few other vacant sites available for development. However, the improved Lechmere Station and the proposed future developments are likely to increase land values in the area, making existing underused parcels attractive sites for potential redevelopment.

The vehicle maintenance building and overnight rail car storage area are compatible with much of the existing industrial land uses along this segment of the railroad corridor. However, its development character and impacts would affect future non-industrial development opportunities in adjacent areas.

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Construction Impacts

This chapter discusses construction impacts related to the construction of the three maintenance facility alternatives. Construction impacts at any of the alternative sites would be the same, unless noted otherwise. Table 4-1 provides a summary of anticipated construction impacts. Table 4-2 summarizes construction mitigation measures for the maintenance facility alternatives.

Table 4-1 Construction Impacts for Yard 8, Option L and Mirror H

Construction Impacts
Traffic ■ There would be no impacts to vehicular traffic directly related to construction of any of the maintenance facility alternatives. ■ Temporary lane closures and temporary traffic detours could be required along O'Brien Highway during construction of Mirror H. However, this construction would also be necessary to support the construction of the new Lechmere Station and would occur regardless of the alternative selected (schedule may be altered by Mirror H).
Air Quality ■ Dust and debris from construction of the maintenance facility. ■ Carbon dioxide emissions from diesel equipment used on-site during construction.
Noise ■ Noise emissions from construction equipment.
Vibration ■ Vibration from heavy construction equipment (e.g., pile drivers).
Water Quality/Stormwater ■ Temporary alterations to the existing stormwater drainage infrastructure during construction. ■ Potential oil/fuel leaks from construction equipment.
Hazardous Materials and Solid Waste ■ Hazardous, contaminated or special wastes could be generated during construction.
Historic and Archaeological ■ Archaeologically sensitive strata below the fill are possible at all the proposed maintenance facility alternatives. An intensive (locational) archaeological survey is recommended prior to construction to determine if archaeologically sensitive strata may be impacted by the construction of the maintenance facility.

Temporary, short-term impacts from construction activities would be mitigated to the extent practicable. Appropriate construction mitigation measures would be incorporated into the contract documents and specifications governing the activities of contractors and subcontractors constructing elements of the Green Line Extension Project, including the maintenance facility and storage yard. On-site resident engineers and inspectors will monitor all construction activities to ensure that mitigation measures are properly implemented. The construction mitigation measures are summarized in Table 4-2.

Table 4-2 Summary of Construction Mitigation Measures

Mitigation Measures
Traffic
■ Temporary detours would be established to minimize traffic disruption due to construction.
Air Quality
■ Apply water to dry soil to prevent dust production.
■ Use water for compaction in the fill areas and as a dust retardant in both the soil cut areas and haul roads.
■ Follow existing MBTA retrofit procedures for construction equipment to reduce emissions.
Noise
■ Use specially quieted equipment with enclosed engines and/or high-performance mufflers.
■ Avoid nighttime construction in residential neighborhoods.
■ Keep truck idling to a minimum.
■ Route construction equipment and vehicles through areas that would cause the least disturbance to nearby receptors where possible.
■ Fit any air-powered equipment with pneumatic exhaust silencers.
■ Locate stationary construction equipment as far as possible from noise-sensitive sites.
■ Construct noise barriers, such as temporary walls or piles of excavated material, between noisy activities and noise-sensitive receivers.
Vibration
■ Avoid nighttime construction in residential neighborhoods.
■ Use alternative construction methods to minimize the use of impact and vibratory equipment (e.g. pile drivers and compactors).
Water Quality/Stormwater
■ Develop and implement a SWPPP in accordance with NPDES and MA DEP standards.
■ Stabilize any highly erosive soils with erosion control blankets and other stabilization methods, as necessary.
■ Reinforce slopes using a hydroseed mix with a resin base, native vegetation, or other approved methods.
■ Use dewatering controls, if necessary.
■ Install a gravel entrance to prevent sediment from being tracked onto roadways and potentially discharged to surface waters.
■ Maintain construction equipment to prevent oil and fuel leaks.
Hazardous Materials and Solid Waste
■ Implement special management procedures for any hazardous, contaminated or special wastes generated during construction, including special handling, dust control, and management and disposal of contaminated soil. Procedures should protect both workers and nearby receptors.
■ Perform subsurface investigations for any planned excavation to test for possible contamination.
■ Prepare a site-specific Health and Safety Plan.
■ Conduct pre-demolition inspections to identify any hazardous materials such asbestos and lead-based paint.

5

Summary and Next Steps

Table 5-1 summarizes the findings of the environmental analysis of the three maintenance facility alternatives – Yard 8, Option L and Mirror H. As described in this document, the environmental analyses indicate that both Yard 8 and Option L are viable locations for support facilities for the Green Line Extension Project. Of the two, each has some environmental advantages and disadvantages. MassDOT believes that the disadvantages of Mirror H outweigh the potential benefits.

MassDOT will review and consider the results of the environmental analysis with the results of the operational analysis to determine whether to substitute an alternative option for Yard 8 as the preferred site for the storage and maintenance facility.

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Table 5-1 Comparison of Yard 8, Option L, and Mirror H - Environmental Analysis

CRITERIA	YARD 8 Rationale	OPTION L Rationale	MIRROR H Rationale
Description	Adjacent to the proposed Green Line alignment and accessed from Inner Belt Road in Somerville	Adjacent to BET, outside the current BET fence line - along the southern and southeastern fringe of the existing Inner Belt industrial area	Partly on NorthPoint parcels C/D/E/F and storage on parcels A/B, and partly on MBTA land currently used for storage by BET
Capital Cost Estimate ($2008)	$79 million	$129 million	$82 million
Total acreage needed	11 acres	11 acres	11 acres
Property Acquisitions			
Number of Parcels	2 Parcels (200 Inner Belt Road, Somerville - partial; 0 Inner Belt Road, Somerville - full)	4 parcels (20 Third Avenue, Somerville [full]; 44-48 Third Avenue, Somerville [full]; 70 Inner Belt Road, Somerville [partial]); 200 Inner Belt Road, Somerville [partial]	NorthPoint Development lots A/B and C/D/E/F [partial], located partly in Cambridge and Somerville
Acreage to be Acquired	5.8 acres	10.2 acres	4.3 acres
Estimated Acquisition Cost	Approx. $15 M	Approx. $51 M	Approx. $11 M
Air Quality	No difference	No difference	No difference
Noise Impacts (cumulative = mainline operations and maintenance facility)			
Potential Moderate Impacts (prior to mitigation)	Two buildings (NorthPoint Properties - Tango and Sierra)	Two buildings (NorthPoint Properties - Tango and Sierra)	Two existing buildings (NorthPoint Properties - Tango and Sierra) and 1 future building (NorthPoint Properties - Site 5)
Potential Severe Impacts (prior to mitigation)	Three buildings (Brickbottom Artists Building, Hampton Inn Hotel, Glass Factory Condos)	Three buildings (Brickbottom Artists Building, Hampton Inn Hotel, Glass Factory Condos)	Three existing buildings (Brickbottom Artists Building, Hampton Inn Hotel, Glass Factory Condos) and four future buildings (NorthPoint Properties - Sites 1, 2, 3, and 4)
Vibration (from maintenance facility only)	No difference	No difference	Presence of double crossover between mainline and maintenance tail track would impact Brickbottom Artists Building (50 feet away)
Traffic and Access	No measurable impact to parking or traffic operations. Access via Washington Street and Inner Belt Road.	No measurable impact to parking or traffic operations. No changes to Brickbottom Station. Access via Washington Street and Inner Belt Road.	No measurable impact to parking or traffic operations. Possible isolated impacts from access improvements to/from facility (extension of Water Street from O'Brien Highway to Mirror H). Timing of construction could be impacted if access required prior to Lechmere Station construction.
Socioeconomics			
Estimated Annual Tax Loss	Approx. $116,063.80 (reduction of 0.12 percent in Somerville)	Approx. $322,439.68 (reduction of 0.33 percent in Somerville)	Approx. $137,626.64 (reduction of 0.05 percent [$56,222.22] in Somerville, 0.03 percent [$78,411.23] in Cambridge and 0.0002 percent [$2,993.19] in Boston)
Estimated Job Displacement	0 jobs	74 jobs (minor overall economic impact compared to total Somerville workforce)	0 jobs
Title VI and Environmental Justice	No difference	Option L would displace or relocate approximately 74 jobs within Somerville (a minor economic impact relative to total Somerville workforce).	No difference
Visual Resources	Moderate visual change to current landscape	Minor visual change to current landscape	Minor visual change to current landscape
Wetlands	No difference	No difference	No difference
Stormwater Management	Stormwater system would be designed to ensure no net increase in peak flow to the existing municipal drain line in Inner Belt Road	Stormwater system would be designed to ensure no net increase in peak flow to the existing MBTA drain line	Infiltration not advised, ongoing groundwater remediation in area. Stormwater system would be designed to ensure no net increase in peak flow to the existing MBTA drain line.
Impervious Area	Increase of approximately 2.6 acres	Reduction of approximately 3.2 acres	Reduction of approximately 0.4 acres
Hazardous Materials	7 Recognized Environmental Conditions	7 Recognized Environmental Conditions	6 Recognized Environmental Conditions
Historic and Archaeological Resources	No difference	No difference	No difference
Section 4(f) Evaluation	No difference	No difference	No difference
Public Parks, Recreation Areas, and Conservation Land	No difference	No difference	No difference
Consistency with Federal, State and Local Planning	Compatible location	Compatible location	Less compatible to state and local planning initiatives. Could preclude future North-South Rail Link project and the ability to expand the BET facility within existing MBTA property limits. Industrial architecture of building may be incompatible with intended residential/mixed-use developments already planned.

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Figures

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Option L

Mirror H

MBTA Boston Engine Terminal

MBTA Open Storage Area

Valley Tracks

Proposed NorthPoint Development

Relocated Lechmere Station

MBTA Commuter Rail Fitchburg Line

MBTA Commuter Rail Lowell Line

Proposed Urban Ring BRT Bridge

Proposed Somerville Community Path

Wiley Track

Proposed 22 Water Street (Residential)

Existing Lechmere Station

Proposed Brickbottom Station

Existing Brickbottom (Residential)

Yard 8

3RD AVENUE

INNER BELT ROAD

SHARED PATH/DRIVE

EAST STREET

WATER STREET

MONSIGNOR O'BRIEN HIGHWAY

ROUTE 28

CAMBRIDGE STREET

THIRD STREET

GORE STREET

WINTER STREET

SCIARAPPA STREET

JOY STREET

CHESTNUT STREET

POPLAR STREET

FITCHBURG STREET

LINWOOD STREET

MCGRATH HIGHWAY

ROUTE 28

RUFO ROAD

SOMERVILLE CAMBRIDGE

EASTON CAMBRIDGE

LECHMERE CANAL PARK

LEGEND

- M.B.T.A. Property
- Pan Am Railways Property
- Private Property
- Alternative Sites
- Proposed Green Line Extension

0 200 400 Feet

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Green Line Extension Project

Figure 1-1

Additional Maintenance Facility Alternatives

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MBTA Boston Engine Terminal
MBTA Open Storage Area
Valley Tracks
Proposed NorthPoint Development
MBTA Commuter Rail Fitchburg Line
MBTA Commuter Rail Lowell Line
Proposed Urban Ring BRT Bridge
Relocated Lechmere Station
Vehicle Maintenance Building (FF Elev. 23.5)
Proposed Somerville Community Path
Maintenance Lead Track
Medford Lead Track
Vehicle Storage (70 cars)
Proposed 22 Water Street (Residential)
Lechmere Lead Track
Wiley Track
Yard 8
Existing Lechmere Station
Proposed Brickbottom Station
Existing Brickbottom (Residential)
3RD AVENUE
INNER BELT ROAD
SHARED PATH/DRIVE
WASHINGTON STREET
JOY STREET
CHESTNUT STREET
POPLAR STREET
FITCHBURG STREET
LINWOOD STREET
MCGRATH HIGHWAY
ROUTE 28
RUFO ROAD
SOMERVILLE
CAMBRIDGE
WATER STREET
MONSIGNOR O'BRIEN HIGHWAY
ROUTE 28
CAMBRIDGE STREET
THIRD STREET
GORE STREET
WINTER STREET
SCIARAPPA STREET
35.0
9.0
30.0
17.0
24.5
25.0
24.5
23.0
9.6
8.0
1.6 % Down
5.2 % Down

LEGEND

- M.B.T.A. Property
- Pan Am Railways Property
- Private Property
- 20.0 Proposed Elevation
- 19.0 Existing Elevation
- 8.0 Existing Commuter Rail Track Elevation
- 10.0 Prop. Road Elevation
- 1.5 % Down Proposed Slope
- Alternative Site
- Proposed Green Line Extension

0 150 300 Feet

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Green Line Extension Project

Figure 2-1

Maintenance Facility
Yard 8

Vehicle Storage East Yard (27 cars)

14.0
10.0

3RD. AVENUE

Vehicle Maintenance Building (FF Elev. 14.5)

MBTA Boston Engine Terminal

MBTA Open Storage Area

Valley Tracks

SOMERVILLE
CAMBRIDGE

Proposed Urban Ring BRT Bridge

Proposed NorthPoint Development

INNER BELT ROAD

Vehicle Storage South Yard (40 cars)

MBTA Commuter Rail Lowell Line

14.0
17.0

MBTA Commuter Rail Fitchburg Line

Relocated Lechmere Station

EAST STREET

WATER STREET

Proposed Somerville Community Path

Union Square Lead Track

35.0
9.0

MONSIGNOR O'BRIEN HIGHWAY
ROUTE 28

INNER BELT ROAD

SHARED PATH/DRIVE

16.0
24.0

Medford Lead Track

CAMBRIDGE STREET

Tail Track

Proposed 22 Water Street (Residential)

THIRD STREET

GORE STREET

WINTER STREET

SCIARAPPA STREET

34.3
8.0

28.2
23.0

Wiley Track

Existing Lechmere Station

27.4
25.0

21.6
23.0

JOY STREET

9.6
8.0

Proposed Brickbottom Station

CHESTNUT STREET

FITCHBURG STREET

MCGRATH HIGHWAY
ROUTE 28

RUFO ROAD

POPLAR STREET

LINWOOD STREET

Existing Brickbottom (Residential)

SOMERVILLE
CAMBRIDGE

LEGEND

- M.B.T.A. Property
- Pan Am Railways Property
- Private Property
- 20.0 Proposed Elevation
- 19.0 Existing Elevation
- 8.0 Existing Commuter Rail Track Elevation
- 10.0 Prop. Road Elevation
- 1.5 % Down Proposed Slope
- Alternative Site
- Proposed Green Line Extension

0 150 300 Feet

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Figure 2-2

Maintenance Facility
Option L

Plotted:4/19/2010 7:47 AM

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Yard 8
Proposed Somerville Community Path
18.5
Tail Track
Wiley Track
Proposed Urban Ring BRT Bridge
Valley Tracks
MBTA Boston Engine Terminal
28.5
23.5
10.5
Double Track Yard Lead
9.6
8.0
35.0
9.0
MBTA Commuter Rail Fitchburg Line
Vehicle Storage Yard (70 Cars)
Vehicle Maintenace Building (F.F. ELEV. 14.5)
28.0
14.5
34.3
8.0
Existing Brickbottom (Residential)
14.5
Proposed NorthPoint Development
28.2
23.0
Lechmere Lead Track
Relocated Lechmere Station
Proposed 22 Water Street (Residential)
42.6
17.0
Existing Lechmere Station
INNER BELT ROAD
3RD AVENUE
CHESTNUT STREET
LINWOOD STREET
FITCHBURG STREET
MCGRATH HIGHWAY - ROUTE 28
RUFO ROAD
SCIARAPPA STREET
WINTER STREET
WATER STREET
MONSIGNOR O'BRIEN HIGHWAY - ROUTE 28
GORE STREET
THIRD STREET
EAST STREET
CHARLESTOWN AVENUE
SOMERVILLE CAMBRIDGE
BOSTON CAMBRIDGE
LOTS A/B
LOTS C/D/E/F
LOTS G/H
0.1 % Down
4 % Down
1.2 % Down
5.2 % Down
2.0 % Down
6.0 % Down
1.4 % Down

LEGEND

- M.B.T.A. Property
- Pan Am Railways Property
- Private Property
- 20.0 Proposed Elevation
- 19.0 Existing Elevation
- 8.0 Existing Commuter Rail Track Elevation
- 10.0 Prop. Road Elevation
- 1.5 % Down Proposed Slope
- Alternative Site
- Proposed Green Line Extension

0 150 300 Feet

Moving Massachusetts Forward MassDOT

Green Line Extension Project

Figure 2-3

Maintenance Facility
Mirror H

\\MABOS\projects\10303.00\graphics\FIGURES\Maintenance_Facility\Option Mirror H Modified - Standard\Yard 7-Yard 8 Scheme H (Yard 7 Full Facility and Yard) mirror draft.dwg Plotted: 4/19/2010 7:43 AM

BOSTON
SOMERVILLE
CAMBRIDGE
PINCKNEY STREET
GLENN STREET PARK
FLORENCE STREET
MYRTLE STREET
WASHINGTON STREET
NEW WASHINGTON STREET
UNNAMED ROAD
FIRST AVENUE
INNER BELT ROAD
SECOND AVENUE
THIRD AVENUE
V-1
Yard 8
ST-1
ST-2
ST-8
Proposed 22 Water Street
WATER STREET
Glass Factory Condos
LECHMERE
LT-10
Hampton Inn
Relocated Lechmere Station
Proposed Archstone-Smith Development
NorthPoint Property Sierra
Existing Lechmere Station
SECOND STREET
Brickbottom Station
Brickbottom Artists Building
CHESTNUT STREET
FITCHBURG STREET
MCGRATH HIGHWAY
POPLAR STREET
LINWOOD STREET
MONSIGNOR OBRIEN HIGHWAY
LINEHAM COURT
STEVENS COURT
WINTER STREET
THIRD STREET
CENTANNI WAY
CAMBRIDGE STREET
SCIARAPPA STREET
SILVA PARK
OTIS STREET
GORE STREET
FIFTH STREET
THORNDIKE STREET
GOLD STAR MOTHERS PARK
SIMONI MEMORIAL RINK
GORE PLAYGROUND

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Legend

- Proposed Station
- Existing MBTA Station
- Schools
- Hospitals
- Fire Stations
- Police Stations
- Proposed Green Line Extension
- Municipal Boundaries
- Alternative Site

Noise and Vibration Measurement Sites

- Noise Measurement Site
- Vibration Measurement Site
- Combined Noise / Vibration Measurement Site

Land Use

- Open Land
- Participation Recreation
- Spectator Recreation
- Multi-Family Residential
- High Density Residential
- Commercial
- Industrial
- Transportaion
- Waste Disposal
- Water
- Parks / Urban Open / Public Land / Educational
- Protected Open Space
- Traffic Study Intersections
- Microscale Air Quality Intersections

0 150 300 600 Feet

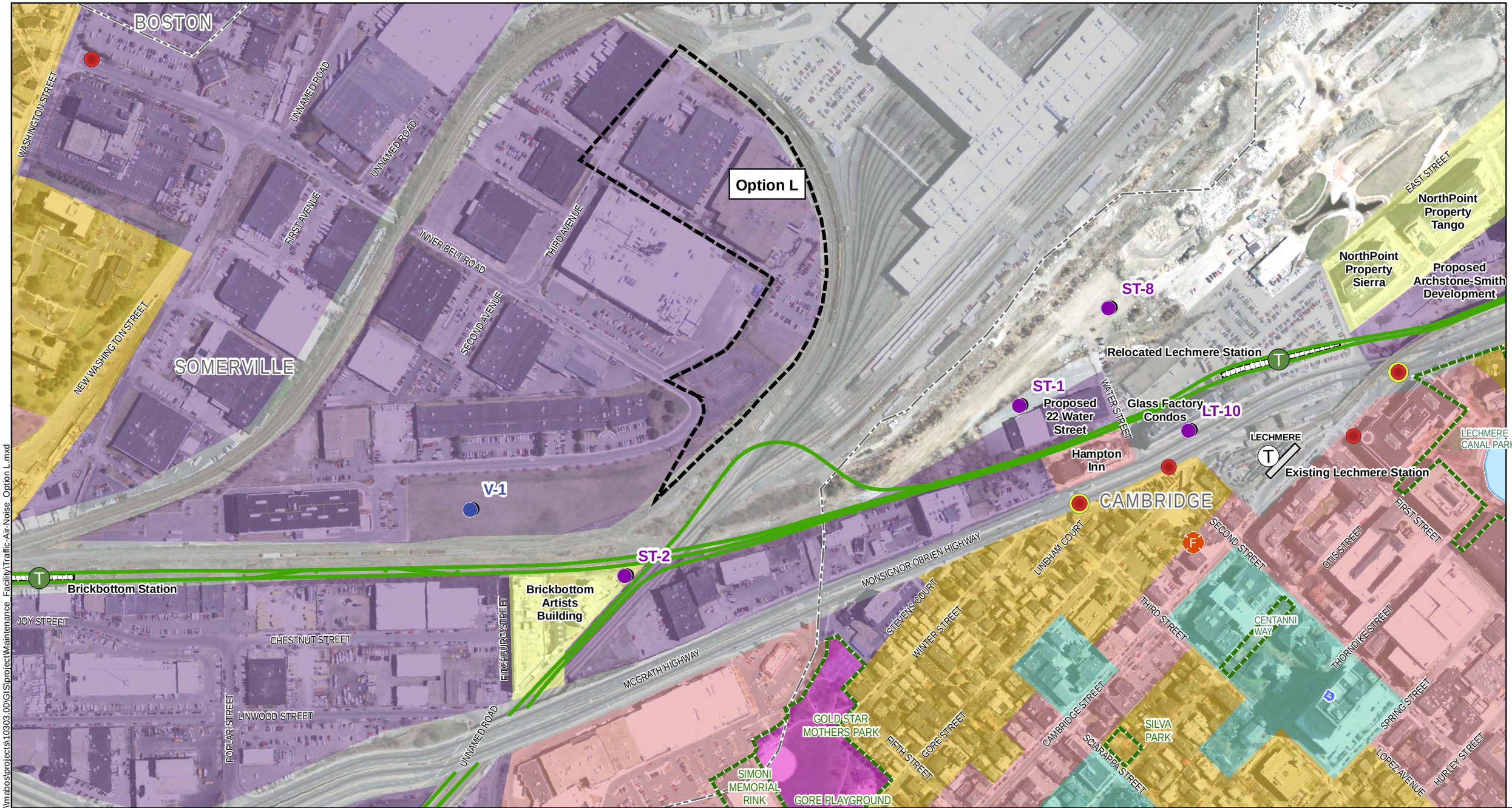
Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-1

Environmental Setting - Yard 8

Sources: MassGIS



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Legend

- Proposed Station
- Existing MBTA Station
- Fire Stations
- Police Stations
- Proposed Green Line Extension

0 150 300 600 Feet

- Municipal Boundaries
- Alternative Site

Noise and Vibration Measurement Sites

- Noise Measurement Site
- Vibration Measurement Site
- Combined Noise / Vibration Measurement Site

Land Use

- Open Land
- Participation Recreation
- Spectator Recreation
- Multi-Family Residential
- High Density Residential
- Industrial
- Commercial
- Transportaion
- Waste Disposal
- Water
- Parks / Urban Open / Public Land / Educational
- Protected and Recreational Open Space
- Traffic Study Intersections
- Microscale Air Quality Intersections

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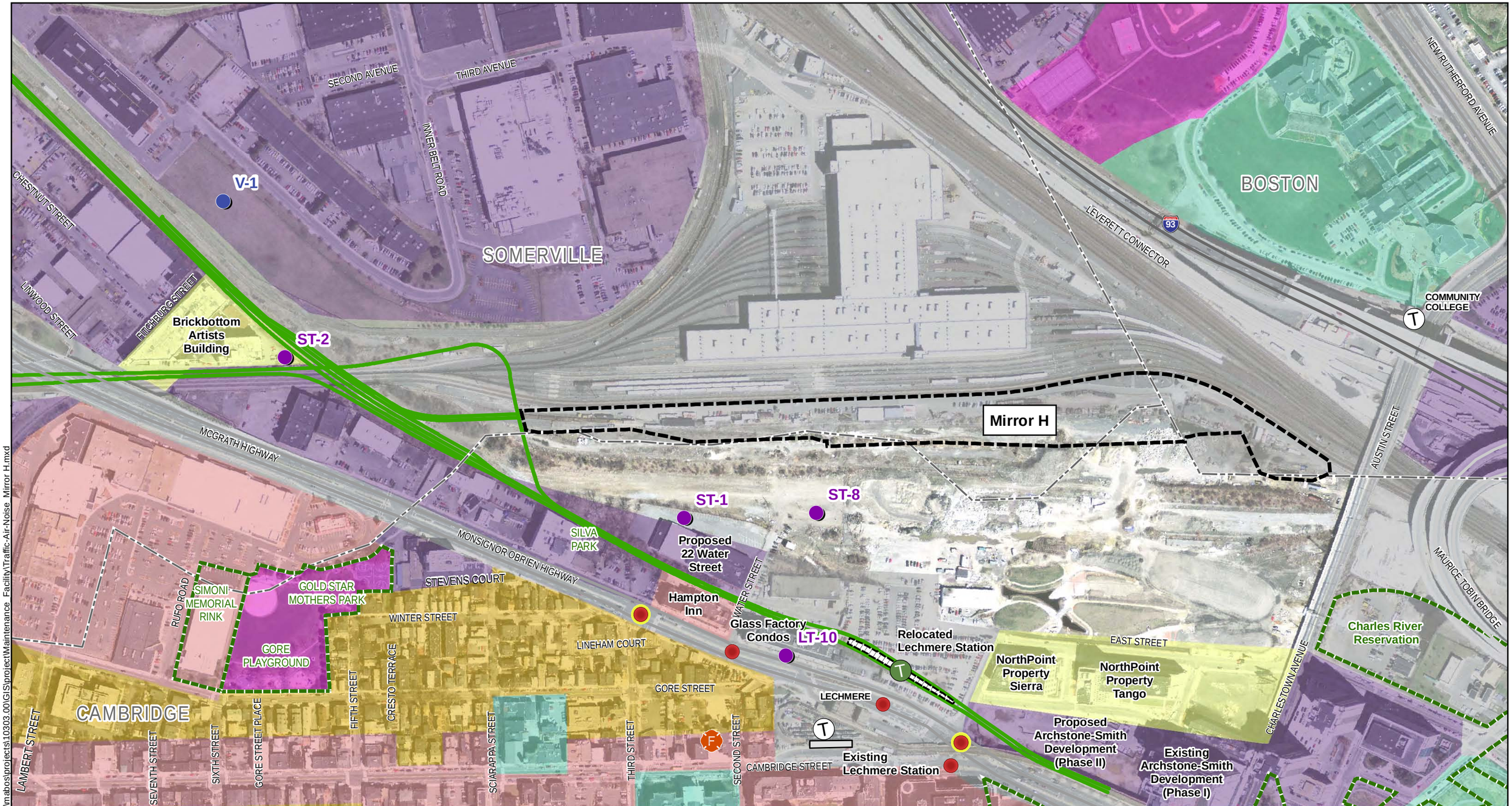
Green Line Extension Project

Figure 3-2

Environmental Setting - Option L

Sources: MassGIS



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Legend

- Proposed Station
- Existing MBTA Station
- Fire Stations
- Police Stations
- Proposed Green Line Extension
- Municipal Boundaries
- Alternative Site

Noise and Vibration Measurement Sites

- Noise Measurement Site
- Vibration Measurement Site
- Combined Noise / Vibration Measurement Site

Land Use

- Open Land
- Participation Recreation
- Spectator Recreation
- Multi-Family Residential
- High Density Residential
- Industrial
- Commercial
- Transportaion
- Waste Disposal
- Water
- Parks / Urban Open / Public Land / Educational
- Protected and Recreational Open Space
- Traffic Study Intersections
- Microscale Air Quality Intersections

0 150 300 600 Feet

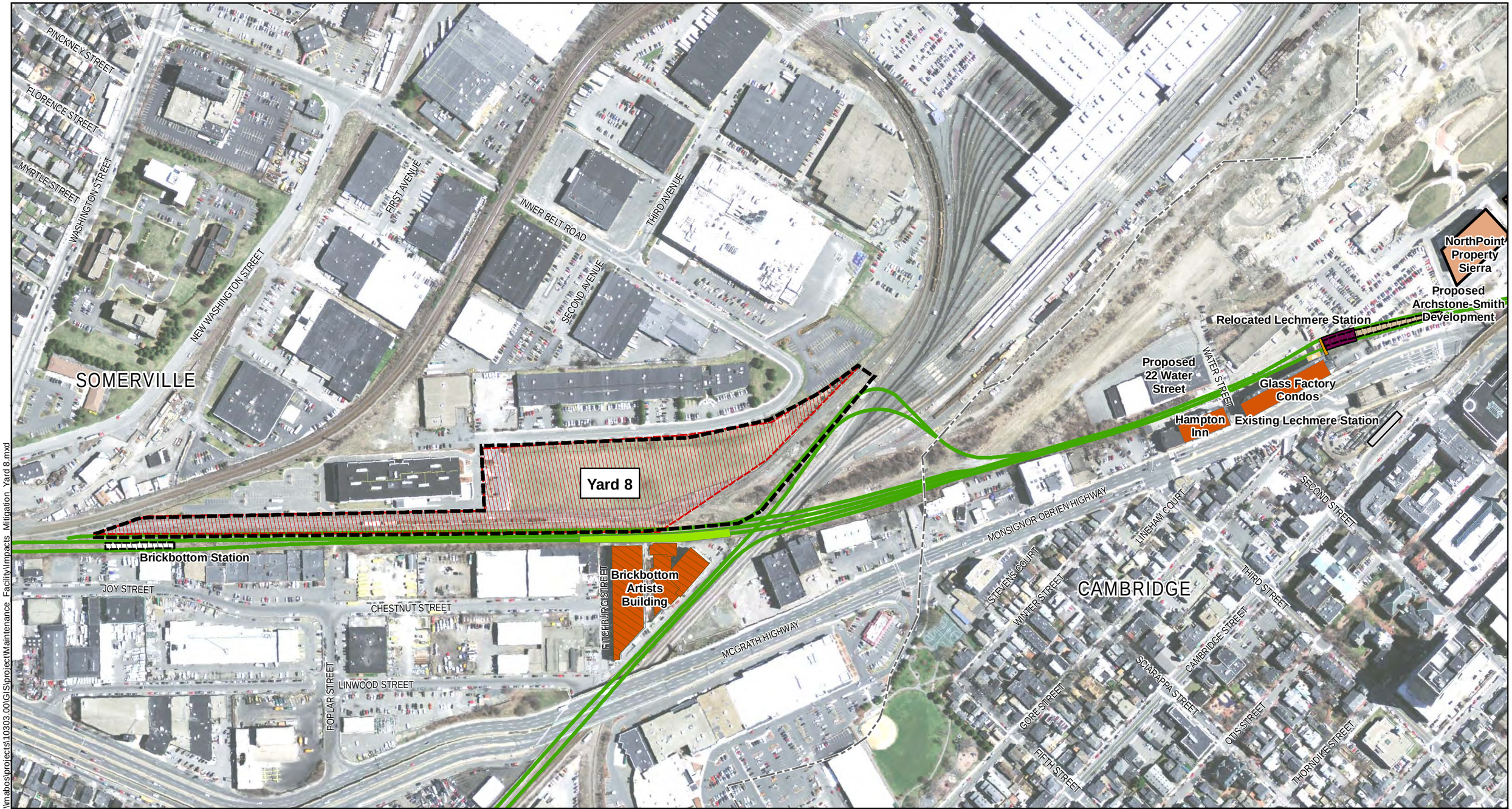
Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-3

Environmental Setting - Mirror H

Sources: MassGIS



\\mabos\projects\10303.00\GIS\project\Maintenance_Facility\Impacts_Mitigation_Yard 8.mxd

Legend

- Proposed Green Line Extension
- Alternative Site
- Property Acquisitions for Maintenance Facility

Station Platform

- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact

Vibration Mitigation

- Green Line Mitigation
- Buildings Impacted by Vibration

- Station Building
- Platform

0 150 300 600 Feet

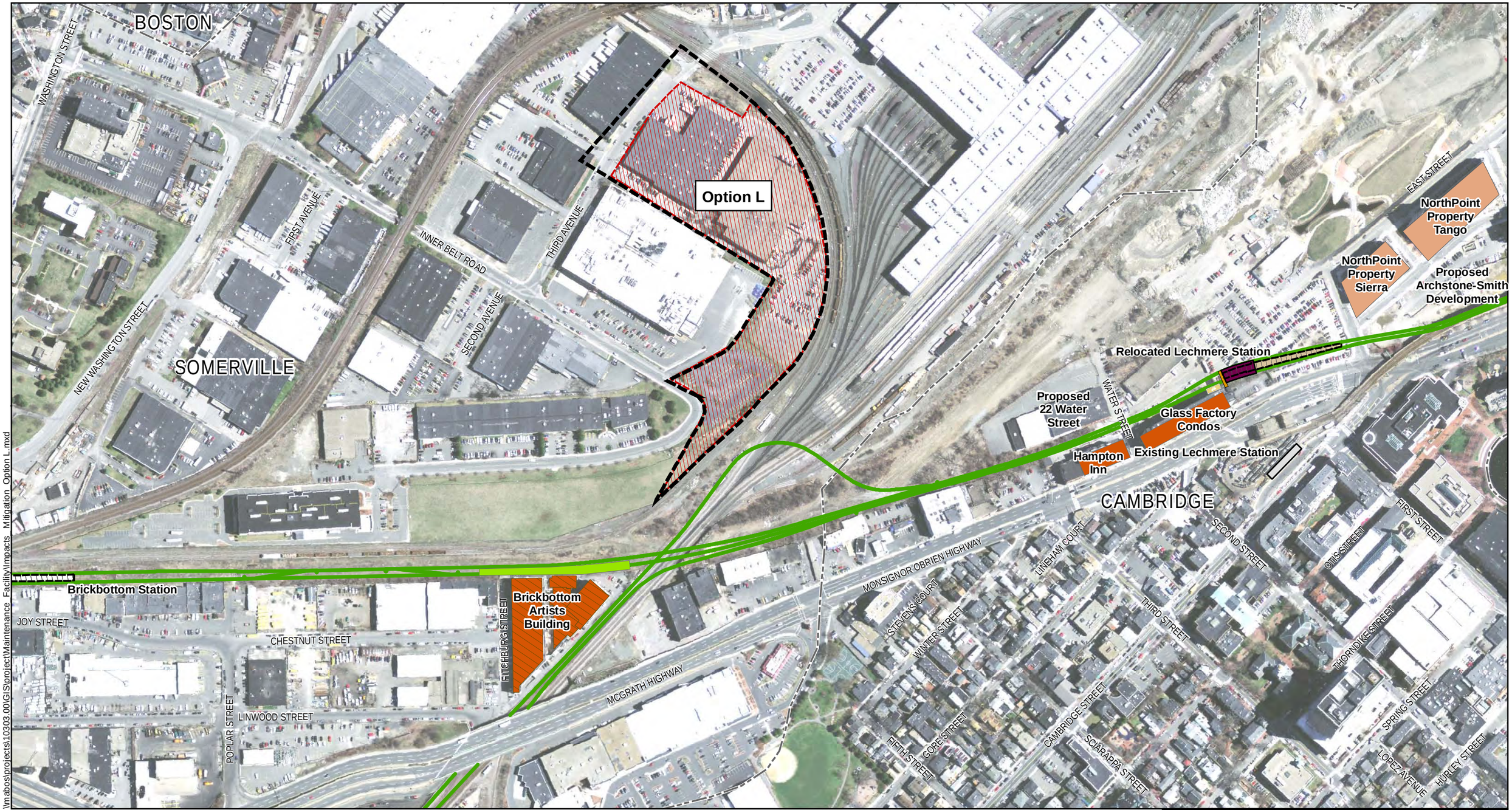
Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-4

Proposed Project Impacts and Mitigation with Yard 8

Sources: MassGIS



\\mabos\projects\10303.00\GIS\project\Maintenance_Facility\Impacts_Mitigation_Option_L.mxd

Legend

- Proposed Green Line Extension
- Alternative Site
- Property Acquisitions for Maintenance Facility

Station Platform

- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact
- Station Building
- Platform

Vibration Mitigation

- Green Line Mitigation
- Buildings Impacted by Vibration

0 150 300 600 Feet

Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-5

Proposed Project Impacts and Mitigation with Option L

Sources: MassGIS

SECOND AVENUE
THIRD AVENUE
CHESTNUT STREET
SOMERVILLE
BOSTON
93
FITCHBURG STREET
Brickbottom Artists Building
LEVERETT CONNECTOR
Mirror H
MCGRATH HIGHWAY
NorthPoint Site 1
NorthPoint Site 2
NorthPoint Site 3
NorthPoint Site 4
NorthPoint Site 5
Proposed 22 Water Street
WATER STREET
STEVENS COURT
Hampton Inn
NorthPoint Park
RUFO ROAD
CAMBRIDGE
MOULINS COURT
LINEHAM COURT
Glass Factory Condos
MONSIGNOR OBRIEN HIGHWAY
Relocated Lechmere Station
EAST STREET
NorthPoint Property Sierra
NorthPoint Property Tango
CRESTO TERRACE
LAMBERT STREET
GORE STREET
CHARLESTOWN AVENUE
Proposed signalized intersection in support of relocated Lechmere Station and Mirror H
Proposed Archstone-Smith Development (Phase II)
Existing Archstone-Smith Development (Phase I)
Existing Lechmere Station
New signalized intersection and extension of First Street in support of relocated Lechmere Station and Mirror H

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Legend

- Proposed Green Line Extension
- Alternative Site
- Property Acquisitions for Maintenance Facility

Station Platform

- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact

Vibration Mitigation

- Green Line Mitigation
- Buildings Impacted by Vibration

- Station Building
- Platform
- Signal

0 150 300 600 Feet

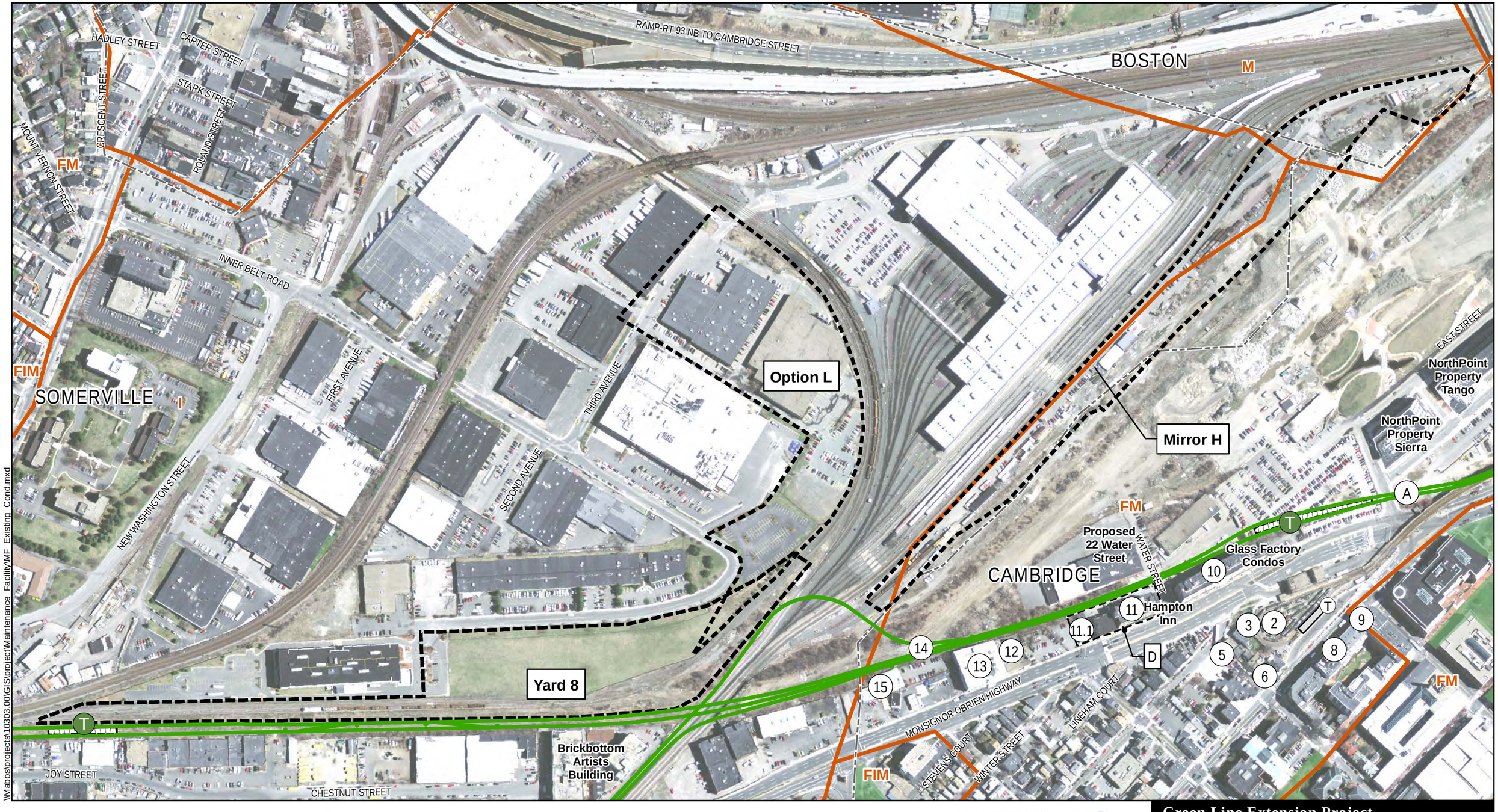
Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-6

Proposed Project Impacts and Mitigation with Mirror H

Sources: MassGIS



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Legend

- Proposed Station
- Existing MBTA Station
- Fire Stations
- Police Stations
- Proposed Green Line Extension
- Alternative Site
- Protected and Recreational Open Space
- Environmental Justice Populations - with Flag
  - F Meets the EJ criteria foreign-born percentage
  - I Meets the EJ criteria for income
  - M Meets the EJ criteria for minority percentage
  - E Meets the EJ criteria for English proficiency percentage
- # Historic Buildings
- D Historic District

0 150 300 600 Feet

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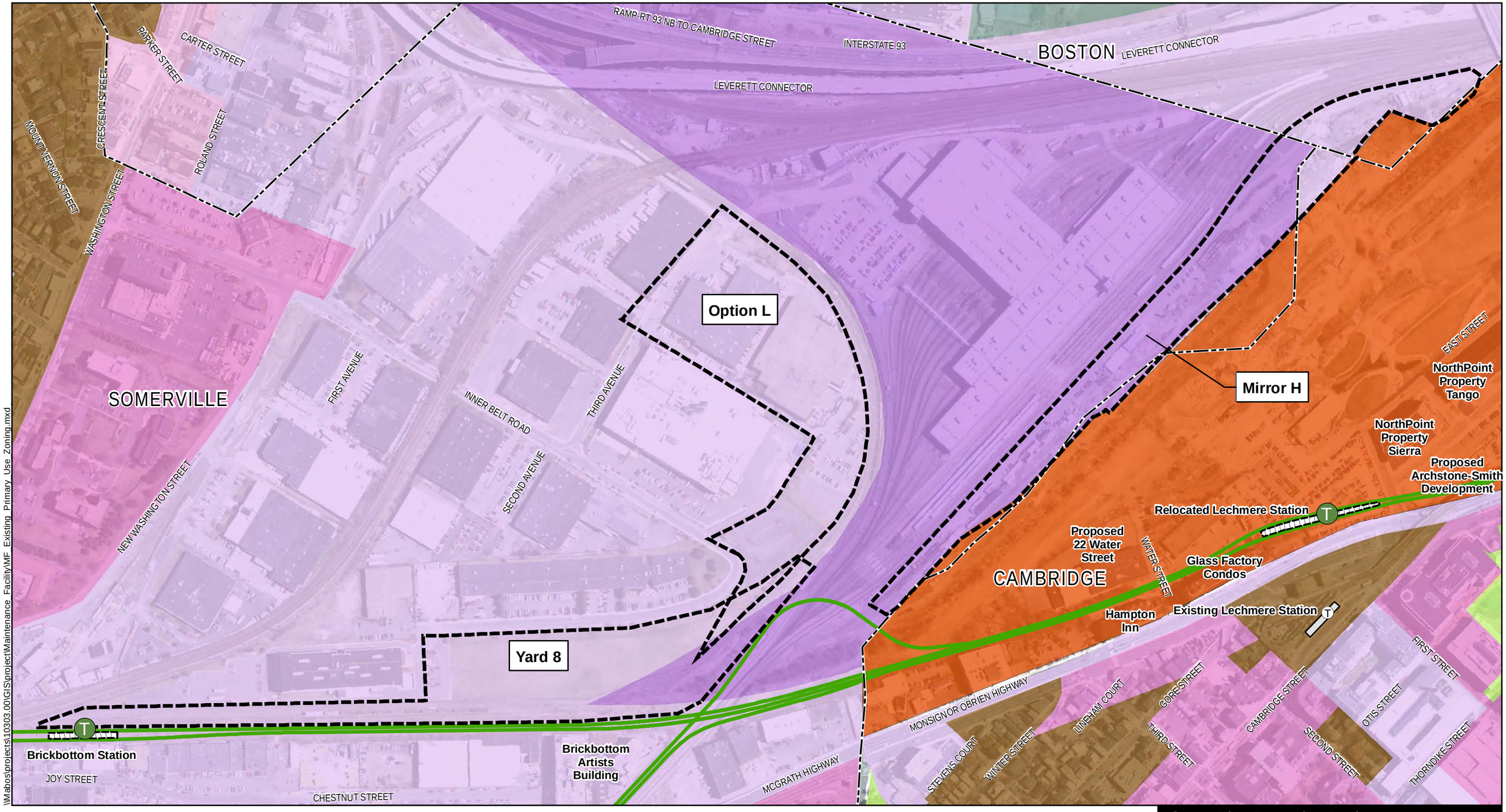
Green Line Extension Project

Figure 3-7

Maintenance Facility Alternatives
Existing Conditions - Environmental Justice and Historic Resources

Sources: MassGIS



\\Mabos\projects\10303.00\GIS\project\Maintenance Facility\MF Existing Primary Use Zoning.mxd

Legend

- Proposed Station
- Existing MBTA Station
- Proposed Green Line Extension Facility
- Alternative Site

Zoning by Primary Use

- Conservation/Passive Recreation
- General Business
- Limited, Central, Hwy Business; Office Park
- General Industrial
- Light Industrial
- Institutional; Health Care
- Multi-family Medium High-density Residential
- North Point Residence, Office and Business District

0 150 300 600 Feet

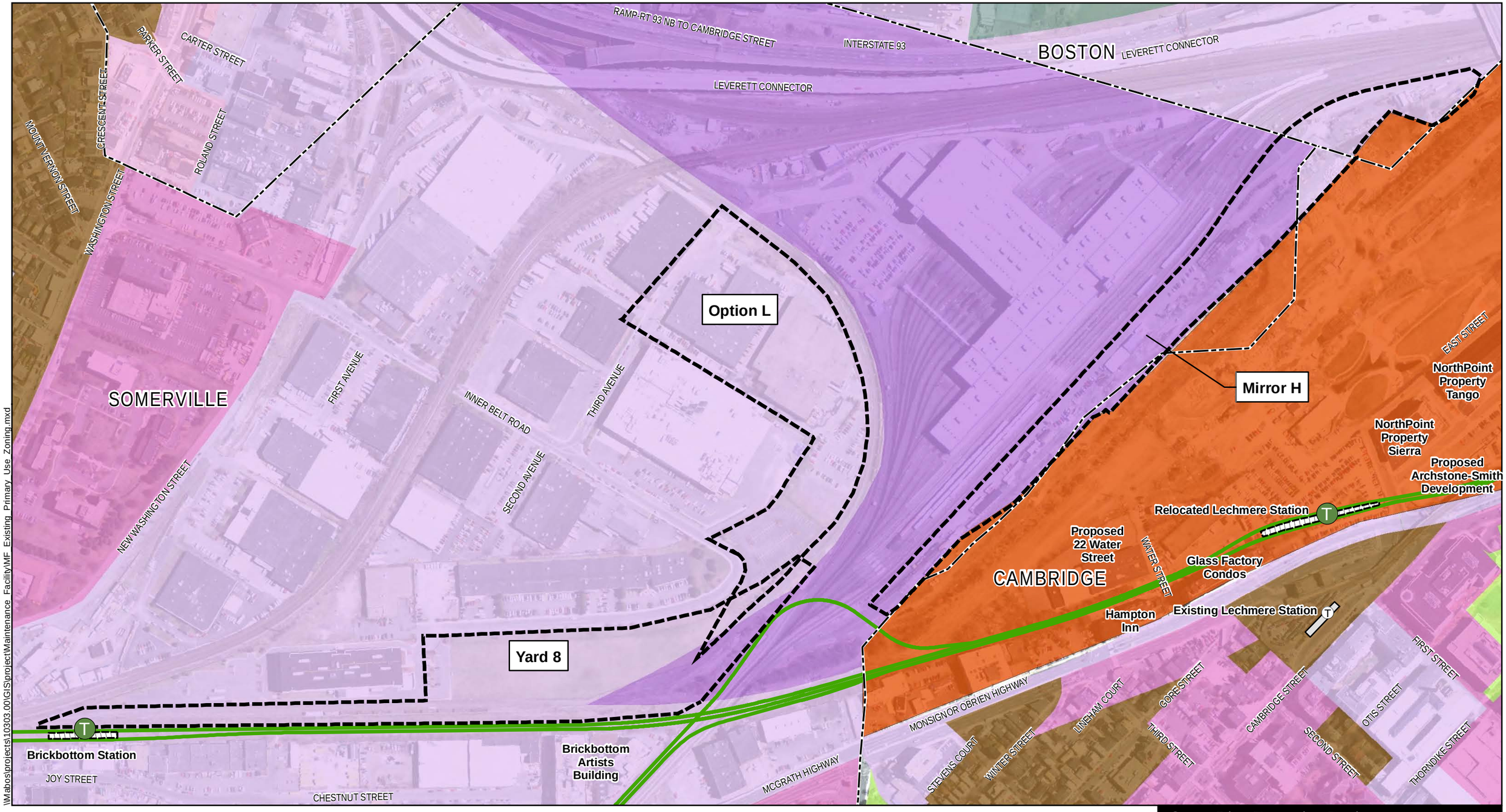
Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-8

Maintenance Facility Alternatives
Primary Use Zoning

Sources: MassGIS



\\Mabos\projects\10303.00\GIS\project\Maintenance Facility\MF Existing Primary Use Zoning.mxd

Legend

- Proposed Station
- Existing MBTA Station
- Proposed Green Line Extension Facility
- Alternative Site

Zoning by Primary Use

- Conservation/Passive Recreation
- General Business
- Limited, Central, Hwy Business; Office Park
- General Industrial
- Light Industrial
- Institutional; Health Care
- Multi-family Medium High-density Residential
- North Point Residence, Office and Business District

0 150 300 600 Feet

Moving Massachusetts Forward. massDOT

Green Line Extension Project

Figure 3-8

Maintenance Facility Alternatives
Primary Use Zoning

Sources: MassGIS

Appendix C
Medford Hillside Neighborhood Included in College Avenue Walk Market Area Memorandum

MEMORANDUM

TO: **Green Line Extension Project Files** **April 6, 2010**

FROM: **Bruce Kaplan and Scott Peterson**

RE: **Medford Hillside Neighborhood Included in the College Avenue Walk Market Area**

BACKGROUND

The specific configuration of the Green Line Extension has undergone many iterations during the course of its project history. Following extensive analysis, MassDOT has recently determined that the best and most feasible project to pursue in the near-term is one that includes (1) a branch from Lechmere Station in East Cambridge to College Avenue in Medford (along the Lowell Commuter Rail right-of-way) and (2) a branch from Lechmere Station to Union Square in Somerville (along the Fitchburg Commuter Rail right-of-way). This configuration is identified in the Green Line Extension Draft Environmental Impact Report/Environmental Assessment as the 'Proposed Project.'

Previous conceptual planning work for the Green Line Extension had also considered potential stations at:

- The intersection of the Lowell Commuter Rail Line right-of-way and Winthrop Street (Medford).
- The intersection of the Lowell Commuter Rail right-of-way and Mystic Valley Parkway/Route 16 (Medford/Somerville).

However, the current proposed project does not include Green Line stations at those locations. As a result, concerns have been raised that a proposed terminus at College Avenue would not adequately serve the Medford Hillside neighborhood, which was identified in the SIP regulation. This memorandum demonstrates that the walk market area for a College Avenue station does indeed cover and include the Medford Hillside neighborhood.

Medford Hillside is defined in this analysis as an area of the City of Medford bounded by the Mystic River to the north, Medford Square to the east, College Avenue to the south, and North Somerville to the west. This area was defined based on an examination of local maps and businesses that identified themselves with the Medford Hillside neighborhood. The Medford Hillside neighborhood is shown as a light red area on the maps in the Exhibits.

ASSUMPTIONS

Exhibit 1, on page 3, presents the northern section of the proposed project as defined in the recently Green Line Extension Draft Environmental Impact Report/ Environmental Assessment, with a branch extending from Lechmere Station towards Medford, and another branch extending towards Union Square (not shown). The terminus of the Medford branch is a station located at the intersection of the Lowell Commuter Rail right-of-way and College Avenue. Since none of the displayed stations have park-and-ride facilities, the ridership markets for these stations are almost wholly defined as persons capable of accessing stations by walking or bicycling, with limited anticipated automobile pick-ups and drop-offs.

For the purposes of the ridership projections developed to support the Draft Environmental Impact Report/Environmental Assessment and the New Starts application materials, MassDOT has followed the requirement of the Federal Transit Administration (FTA) that we use a one-mile walk-access catchment area for each of the proposed Green Line Extension stations. To refine this analysis further, however, MassDOT has also separately mapped (see Exhibit 2 on page 4) a smaller ¾-mile walk-access catchment area.

CONCLUSION

Exhibit 1 displays the one-mile radius walk catchment area, shown in orange on the map, extending from the proposed College Avenue Station outward via the walk and bike network. Every portion of the Medford Hillside neighborhood, represented by the transportation analysis zones (TAZs) that are used by the regional travel demand model, are covered by the one-mile walk-access catchment area. This means that all trips from TAZs 555-558 have the ability to access the College Avenue Station and use the proposed Green Line Extension. Thus, the Medford Hillside neighborhood is well served by the College Avenue Station in the regional travel demand model (the one-mile radius walk catchment area). The smaller ¾-mile walk-access catchment area (displayed in orange in Exhibit 2) continues to cover the majority of the Medford Hillside area. Exhibit 2 demonstrates that the bulk of the Medford Hillside neighborhood is served by the College Avenue station even when stricter ¾-mile non-FTA-sanctioned walk-access assumptions are made.

EXHIBIT 1

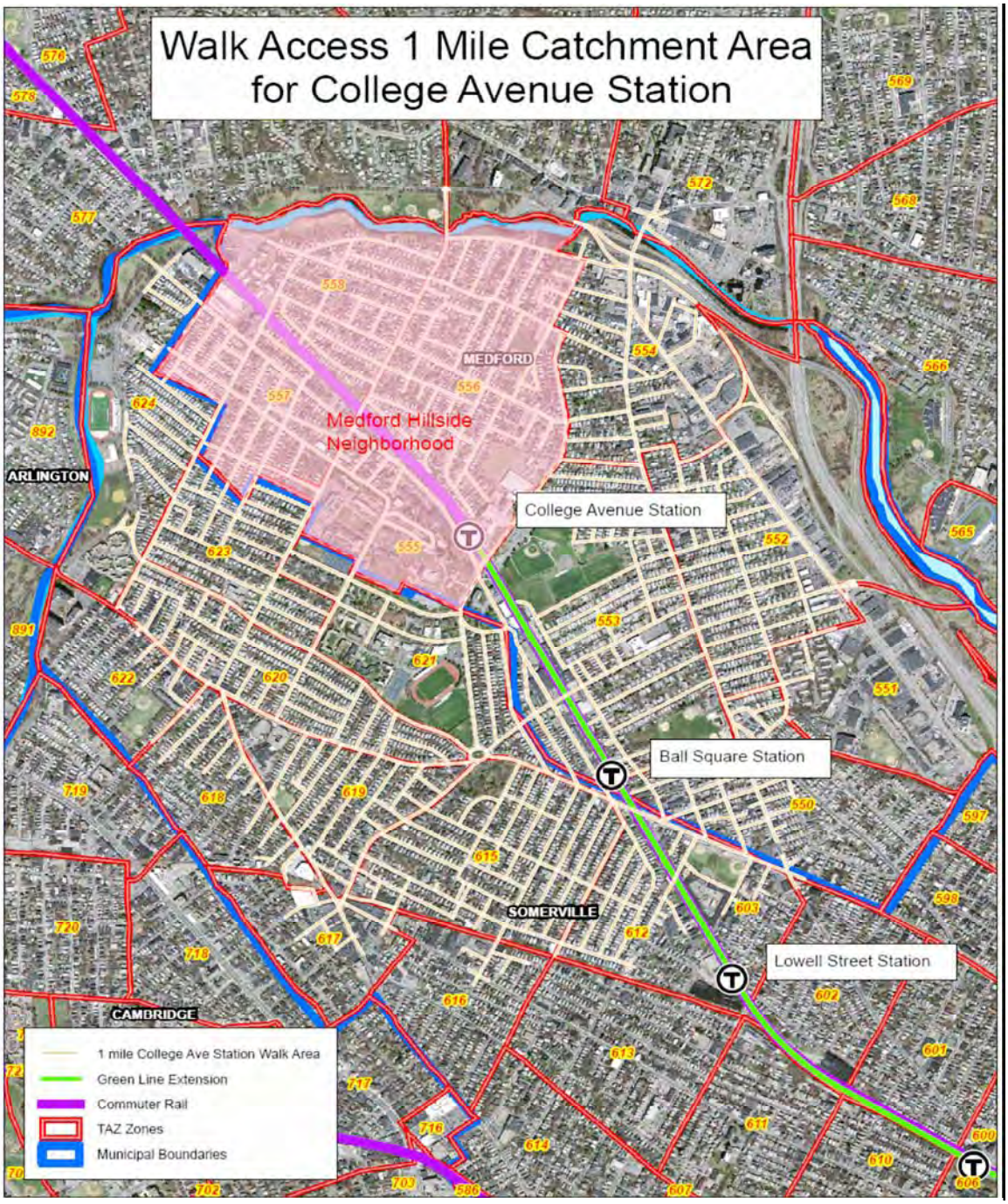
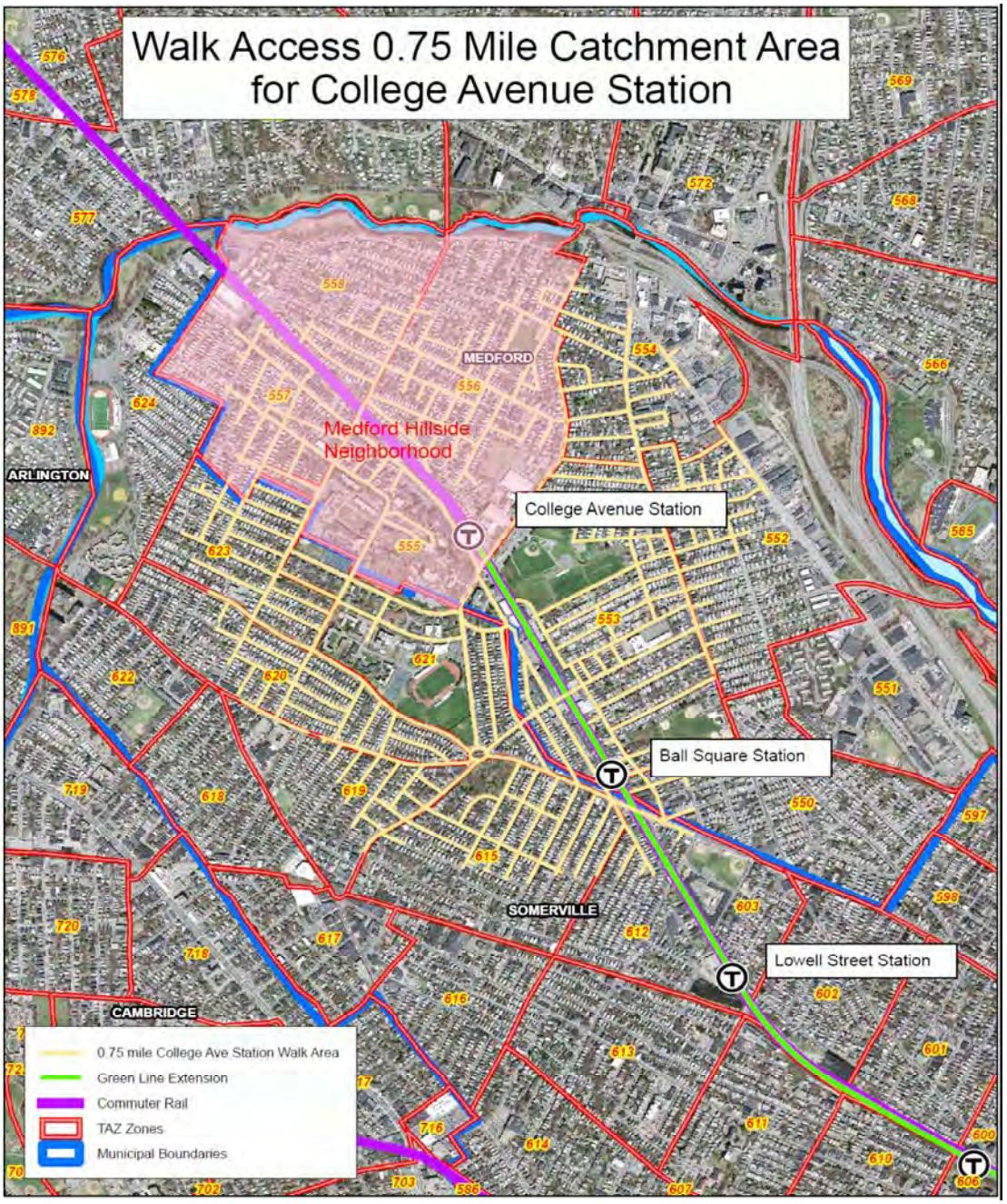

Walk Access 1 Mile Catchment Area for College Avenue Station
Medford Hillside Neighborhood
College Avenue Station
Ball Square Station
Lowell Street Station
MEDFORD
ARLINGTON
SOMERVILLE
CAMBRIDGE
1 mile College Ave Station Walk Area
Green Line Extension
Commuter Rail
TAZ Zones
Municipal Boundaries

EXHIBIT 2


Walk Access 0.75 Mile Catchment Area for College Avenue Station
Medford Hillside Neighborhood
College Avenue Station
Ball Square Station
Lowell Street Station
MEDFORD
ARLINGTON
SOMERVILLE
CAMBRIDGE
0.75 mile College Ave Station Walk Area
Green Line Extension
Commuter Rail
TAZ Zones
Municipal Boundaries

Appendix D
Lechmere Station Transportation Analysis

- Synchro Results
- MBTA Rider Survey
  - Bus Route Maps to Lechmere with Passenger Starting Locations
  - Walking Routes to Lechmere with Passenger Starting Location
- Mitigation

Synchro Results

Table 1
Signalized Intersection Capacity Analysis Summary
Weekday Morning

		2030 Build Alternative 1			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.89	78	E	
	EB LT-TH-RT	1.15	97	F	#988
	WB TH-RT	0.33	5	A	71
	NB LT	0.38	45	D	127
	NB LT-TH-RT	0.39	46	D	125
	SB LT-TH-RT	0.08	60	E	11
O'Brien Highway at Water Street		0.73	20	B	
	EB LT	0.82	40	D	m332
	EB TH	0.67	13	B	m153
	WB TH-RT	0.29	17	B	m151
	SB RT	0.48	31	C	185
O'Brien Highway at First Street Extension		0.90	40	D	
	EB TH	0.95	28	C	#538
	EB RT	0.21	9	A	m96
	WB LT	0.77	51	D	210
	WB TH-RT	0.51	32	C	234
	NB LT	0.12	21	C	m26
	NB TH	0.87	47	D	m#270
	SB LT-TH-RT	0.99	90	F	#265
Cambridge Street at First Street Extension		0.91	41	D	
	EB LT	0.38	39	D	131
	EB TH-RT	0.82	57	E	264
	NB LT-TH	0.81	63	E	#212
	NB RT	0.25	23	C	91
	SB TH-RT	>1.20	33	C	m#496
O'Brien Highway at Charlestown Avenue		>1.20	115	F	
	EB LT	>1.20	>120	F	#306
	EB TH	0.92	48	D	#406
	EB RT	0.34	1	A	0
	WB LT	>1.20	>120	F	m#400
	WB TH	0.69	51	D	m395
	WB RT	0.56	18	B	m72
	NEB LT	0.65	56	E	#166
	NEB TH	1.04	106	F	#275
	NEB RT	0.64	39	D	265
	SWB LT	>1.20	>120	F	#707
	SWB LT-TH-RT	>1.20	>120	F	#706

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	5	2215	655	0	650	15	175	1	35	1	1	1		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Confl. Peds. (#/hr)			135	135			10		110					
Peak Hour Factor	0.92	0.95	0.95	0.93	0.93	0.92	0.91	0.90	0.91	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	3%	3%	13%	11%	2%	4%	2%	0%	2%	2%	2%		
Shared Lane Traffic (%)							39%							
Lane Group Flow (vph)	0	3026	0	0	715	0	117	114	0	0	3	0		
Turn Type	Perm						Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6									4				
Detector Phase	6	6			2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0		3.0	3.0		4.0	4.0
Minimum Split (s)	23.0	23.0					28.0	28.0		8.0	8.0		21.0	9.0
Total Split (s)	75.0	75.0	0.0	0.0	84.0	0.0	28.0	28.0	0.0	8.0	8.0	0.0	75.0	9.0
Total Split (%)	62.5%	62.5%	0.0%	0.0%	70.0%	0.0%	23.3%	23.3%	0.0%	6.7%	6.7%	0.0%	63%	8%
Yellow Time (s)	4.0	4.0					4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max					Max	Max		None	None		C-Max	None
v/c Ratio		1.10			0.32		0.38	0.39			0.05			
Control Delay		71.9			4.8		45.8	46.2			51.3			
Queue Delay		69.3			0.3		0.0	0.0			0.0			
Total Delay		141.2			5.0		45.8	46.2			51.3			
Queue Length 50th (ft)		~839			40		73	71			1			
Queue Length 95th (ft)		#988			71		127	125			11			
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)														
Base Capacity (vph)		2763			2261		308	294			60			
Starvation Cap Reductn		0			844		0	0			0			
Spillback Cap Reductn		345			0		0	0			0			
Storage Cap Reductn		0			0		0	0			0			
Reduced v/c Ratio		1.25			0.50		0.38	0.39			0.05			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: O'Brien Hwy & Third St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	2215	655	0	650	15	175	1	35	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91			0.95		0.95	0.95			1.00	
Frpb, ped/bikes		0.97			1.00		1.00	0.94			1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00			1.00	
Frt		0.97			1.00		1.00	0.95			0.95	
Flt Protected		1.00			1.00		0.95	0.97			0.98	
Satd. Flow (prot)		4564			3139		1539	1469			1750	
Flt Permitted		0.94			1.00		0.95	0.97			1.00	
Satd. Flow (perm)		4286			3139		1539	1469			1779	
Peak-hour factor, PHF	0.92	0.95	0.95	0.93	0.93	0.92	0.91	0.90	0.91	0.92	0.92	0.92
Adj. Flow (vph)	5	2332	689	0	699	16	192	1	38	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	3026	0	0	715	0	117	114	0	0	2	0
Confl. Peds. (#/hr)			135	135			10		110			
Heavy Vehicles (%)	2%	3%	3%	13%	11%	2%	4%	2%	0%	2%	2%	2%
Turn Type	Perm						Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6									4		
Actuated Green, G (s)		72.4			81.4		23.0	23.0			0.6	
Effective Green, g (s)		73.4			82.4		24.0	24.0			1.6	
Actuated g/C Ratio		0.61			0.69		0.20	0.20			0.01	
Clearance Time (s)		5.0					5.0	5.0			5.0	
Vehicle Extension (s)		3.0					3.0	3.0			3.0	
Lane Grp Cap (vph)		2622			2155		308	294			24	
v/s Ratio Prot					c0.23		0.08	c0.08				
v/s Ratio Perm		c0.71									c0.00	
v/c Ratio		1.15			0.33		0.38	0.39			0.08	
Uniform Delay, d1		23.3			7.6		41.6	41.6			58.5	
Progression Factor		1.00			0.69		1.00	1.00			1.00	
Incremental Delay, d2		74.1			0.1		3.5	3.8			1.5	
Delay (s)		97.4			5.3		45.1	45.5			60.0	
Level of Service		F			A		D	D			E	
Approach Delay (s)		97.4			5.3			45.3			60.0	
Approach LOS		F			A			D			E	

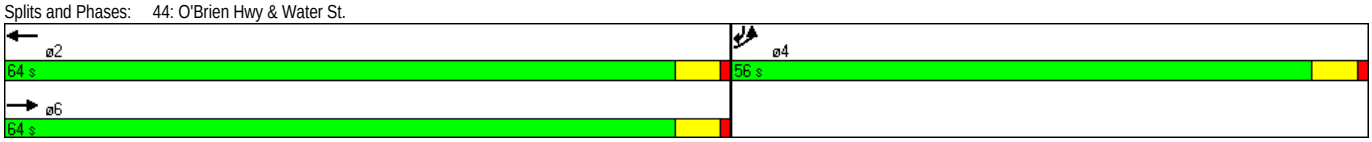
Intersection Summary			
HCM Average Control Delay	77.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

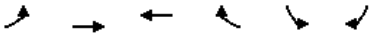
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	460	1790	420	65	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Peak Hour Factor	0.92	0.95	0.93	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	11%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	500	1884	523	0	0	266
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	28.0	17.0			31.0
Total Split (s)	56.0	64.0	64.0	0.0	0.0	56.0
Total Split (%)	46.7%	53.3%	53.3%	0.0%	0.0%	46.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.82	0.67	0.29			0.48
Control Delay	39.1	14.3	19.0			32.0
Queue Delay	89.2	2.5	0.0			0.0
Total Delay	128.3	16.8	19.0			32.0
Queue Length 50th (ft)	361	151	65			139
Queue Length 95th (ft)	m332	m153	m151			185
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	741	2815	1802			675
Starvation Cap Reductn	319	769	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	1.18	0.92	0.29			0.39

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	460	1790	420	65	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.91	0.95			1.00
Frt	1.00	1.00	0.98			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1711	4868	3114			1558
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1711	4868	3114			1558
Peak-hour factor, PHF	0.92	0.95	0.93	0.92	0.92	0.92
Adj. Flow (vph)	500	1884	452	71	0	266
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	500	1884	523	0	0	266
Heavy Vehicles (%)	2%	3%	11%	2%	2%	2%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	41.6	68.4	68.4			41.6
Effective Green, g (s)	42.6	69.4	69.4			42.6
Actuated g/C Ratio	0.36	0.58	0.58			0.36
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	607	2815	1801			553
v/s Ratio Prot	c0.29	c0.39	0.17			0.17
v/s Ratio Perm						
v/c Ratio	0.82	0.67	0.29			0.48
Uniform Delay, d1	35.3	17.4	12.8			30.1
Progression Factor	1.10	0.75	1.32			1.00
Incremental Delay, d2	0.9	0.1	0.4			0.7
Delay (s)	39.5	13.3	17.3			30.8
Level of Service	D	B	B			C
Approach Delay (s)		18.8	17.3		30.8	
Approach LOS		B	B		C	

Intersection Summary			
HCM Average Control Delay	19.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1505	160	445	475	75	30	235	0	115	285	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)						10	340			675		340
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1672	178	494	611	0	33	261	0	0	462	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		24.0	24.0		21.0	21.0	
Total Split (s)	0.0	43.0	67.0	32.0	43.0	0.0	24.0	24.0	0.0	21.0	21.0	0.0
Total Split (%)	0.0%	35.8%	55.8%	26.7%	35.8%	0.0%	20.0%	20.0%	0.0%	17.5%	17.5%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		Max	Max		Max	Max	
v/c Ratio		0.95	0.21	0.77	0.51		0.12	0.87			0.99	
Control Delay		30.1	9.6	53.5	32.9		21.0	49.6			90.2	
Queue Delay		0.0	0.2	0.0	0.0		0.0	98.6			337.4	
Total Delay		30.1	9.7	53.5	32.9		21.0	148.2			427.6	
Queue Length 50th (ft)		379	65	164	172		12	139			167	
Queue Length 95th (ft)		#538	m96	210	234		m26	m#270			#265	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1756	853	748	1189		275	300			468	
Starvation Cap Reductn		0	0	0	0		0	85			0	
Spillback Cap Reductn		0	219	0	0		0	0			209	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		0.95	0.28	0.66	0.51		0.12	1.21			1.78	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 31 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1505	160	445	475	75	30	235	0	115	285	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91	1.00	0.97	0.95		1.00	1.00			0.95	
Frpb, ped/bikes		1.00	1.00	1.00	0.99		1.00	1.00			0.99	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.98		1.00	1.00			0.99	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)		4916	1531	3204	3328		1652	1801			3307	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (perm)		4916	1531	3204	3328		1652	1801			3307	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1672	178	494	528	83	33	261	0	128	317	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1672	178	494	611	0	33	261	0	0	462	0
Confl. Peds. (#/hr)						10	340			675		340
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		41.9	65.9	23.1	41.9		19.0	19.0			16.0	
Effective Green, g (s)		42.9	66.9	24.1	42.9		20.0	20.0			17.0	
Actuated g/C Ratio		0.36	0.56	0.20	0.36		0.17	0.17			0.14	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1757	854	643	1190		275	300			468	
v/s Ratio Prot		c0.34	0.12	c0.15	0.18		0.02	c0.14			c0.14	
v/s Ratio Perm												
v/c Ratio		0.95	0.21	0.77	0.51		0.12	0.87			0.99	
Uniform Delay, d1		37.5	13.3	45.3	30.3		42.5	48.7			51.4	
Progression Factor		0.46	0.64	1.00	1.00		0.47	0.48			1.00	
Incremental Delay, d2		10.6	0.4	5.5	1.6		0.8	24.0			38.6	
Delay (s)		27.8	8.9	50.8	31.9		20.7	47.3			89.9	
Level of Service		C	A	D	C		C	D			F	
Approach Delay (s)		26.0			40.4			44.3			89.9	
Approach LOS		C			D			D			F	

Intersection Summary				
HCM Average Control Delay	39.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	80.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø4	ø8
Lane Configurations														
Volume (vph)	135	210	55	0	0	0	60	130	100	0	325	570		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	11	11	10	12	12	12		
Storage Length (ft)	170		0	0		0	0		0	0		0		
Storage Lanes	1		0	0		0	0		1	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			No		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		181			350			571			169			
Travel Time (s)		4.1			8.0			13.0			3.8			
Confl. Peds. (#/hr)			80				125		645			125		
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.92	0.80	0.80	0.80	0.90	0.90	0.90		
Heavy Vehicles (%)	2%	10%	9%	10%	5%	2%	17%	2%	24%	2%	2%	2%		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	155	304	0	0	0	0	0	237	125	0	994	0		
Turn Type	Split						Split		custom					
Protected Phases	6	6					3	3	3 8		4 8		4	8
Permitted Phases														
Detector Phase	6	6					3	3	3 8		4 8			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0					4.0	4.0
Minimum Split (s)	23.0	23.0					10.0	10.0					15.0	20.0
Total Split (s)	38.0	38.0	0.0	0.0	0.0	0.0	25.0	25.0	48.0	0.0	57.0	0.0	34.0	23.0
Total Split (%)	31.7%	31.7%	0.0%	0.0%	0.0%	0.0%	20.8%	20.8%	40.0%	0.0%	47.5%	0.0%	28%	19%
Yellow Time (s)	4.0	4.0					4.0	4.0					4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0					1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	0.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag	Lag	Lag					Lead	Lead					Lead	Lag
Lead-Lag Optimize?							Yes	Yes						Yes
Recall Mode	None	None					None	None					C-Max	None
v/c Ratio	0.38	0.82						0.81	0.25		1.25dr			
Control Delay	40.0	60.7						69.2	26.4		37.8			
Queue Delay	0.5	0.0						11.6	0.0		48.6			
Total Delay	40.5	60.7						80.8	26.4		86.5			
Queue Length 50th (ft)	88	195						152	56		~400			
Queue Length 95th (ft)	131	264						#212	91		m#496			
Internal Link Dist (ft)		101			270			491			89			
Turn Bay Length (ft)	170													
Base Capacity (vph)	485	443						306	494		1009			
Starvation Cap Reductn	0	0						0	0		125			
Spillback Cap Reductn	105	0						50	0		0			
Storage Cap Reductn	0	0						0	0		0			
Reduced v/c Ratio	0.41	0.69						0.93	0.25		1.12			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 2 (2%), Referenced to phase 4:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: Cambridge St. & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	210	55	0	0	0	60	130	100	0	325	570
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	11	11	10	12	12	12
Total Lost time (s)	4.0	4.0						4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00						1.00	1.00		0.95	
Frpb, ped/bikes	1.00	0.97						1.00	1.00		0.64	
Flpb, ped/bikes	1.00	1.00						1.00	1.00		1.00	
Frt	1.00	0.97						1.00	0.85		0.90	
Flt Protected	0.95	1.00						0.98	1.00		1.00	
Satd. Flow (prot)	1711	1564						1694	1216		2062	
Flt Permitted	0.95	1.00						0.98	1.00		1.00	
Satd. Flow (perm)	1711	1564						1694	1216		2062	
Peak-hour factor, PHF	0.87	0.87	0.87	0.83	0.83	0.92	0.80	0.80	0.80	0.90	0.90	0.90
Adj. Flow (vph)	155	241	63	0	0	0	75	162	125	0	361	633
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	155	304	0	0	0	0	0	237	125	0	994	0
Confl. Peds. (#/hr)			80				125		645			125
Heavy Vehicles (%)	2%	10%	9%	10%	5%	2%	17%	2%	24%	2%	2%	2%
Turn Type	Split						Split		custom			
Protected Phases	6	6					3	3	3 8		4 8	
Permitted Phases												
Actuated Green, G (s)	27.5	27.5						19.7	48.5		57.8	
Effective Green, g (s)	28.5	28.5						20.7	49.5		58.8	
Actuated g/C Ratio	0.24	0.24						0.17	0.41		0.49	
Clearance Time (s)	5.0	5.0						5.0				
Vehicle Extension (s)	3.0	3.0						3.0				
Lane Grp Cap (vph)	406	371						292	502		1010	
v/s Ratio Prot	0.09	c0.19						c0.14	0.10		c0.48	
v/s Ratio Perm												
v/c Ratio	0.38	0.82						0.81	0.25		1.25dr	
Uniform Delay, d1	38.4	43.3						47.8	23.1		30.1	
Progression Factor	1.00	1.00						1.00	1.00		0.42	
Incremental Delay, d2	0.6	13.2						15.6	0.3		20.2	
Delay (s)	39.0	56.5						63.4	23.3		32.8	
Level of Service	D	E						E	C		C	
Approach Delay (s)		50.6			0.0			49.6			32.8	
Approach LOS		D			A			D			C	

Intersection Summary			
HCM Average Control Delay	40.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	ø2
Lane Configurations													
Volume (vph)	170	1320	440	310	835	300	135	430	280	535	915	105	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	11	11	10	11	10	10	11	11	10	11	11	
Storage Length (ft)	350		200	0		0	0		0	120		0	
Storage Lanes	1		1	1		1	1		1	1		0	
Taper Length (ft)	25		25	25		25	25		25	25		25	
Right Turn on Red			No			No			No			No	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		415			243			462			1068		
Travel Time (s)		9.4			5.5			10.5			24.3		
Confl. Peds. (#/hr)	20		45	45		20	30		5	5		30	
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	9%	3%	3%	3%	4%	3%	1%	5%	3%	1%	3%	7%	
Shared Lane Traffic (%)										10%			
Lane Group Flow (vph)	193	1500	500	337	908	326	145	462	301	517	1155	0	
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split			
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5		2
Permitted Phases			Free										
Detector Phase	1	1 2		3	2 3	3 5	4	4	3 4	5	5		
Switch Phase													
Minimum Initial (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	14.0			9.0			10.0	10.0		27.0	27.0		18.0
Total Split (s)	14.0	44.0	0.0	21.0	51.0	56.0	20.0	20.0	41.0	35.0	35.0	0.0	30.0
Total Split (%)	11.7%	36.7%	0.0%	17.5%	42.5%	46.7%	16.7%	16.7%	34.2%	29.2%	29.2%	0.0%	25%
Yellow Time (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0			1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead			Lead			Lag	Lag					Lag
Lead-Lag Optimize?	Yes			Yes			Yes	Yes					Yes
Recall Mode	None			None			None	None		None	None		C-Max
v/c Ratio	1.50	0.92	0.34	1.45	0.69	0.56	0.65	1.04	0.64	1.32	1.42		
Control Delay	297.4	49.2	0.6	262.4	52.6	12.3	64.2	104.7	43.4	197.1	228.8		
Queue Delay	0.0	656.2	0.0	67.9	499.5	0.7	0.0	0.0	0.1	0.0	0.0		
Total Delay	297.4	705.4	0.6	330.3	552.1	12.9	64.2	104.7	43.5	197.1	228.8		
Queue Length 50th (ft)	~182	359	0	~324	349	67	95	~179	177	~500	~581		
Queue Length 95th (ft)	#306	#406	0	m#400	m395	m72	#166	#275	265	#707	#706		
Internal Link Dist (ft)		335			163			382			988		
Turn Bay Length (ft)	350		200							120			
Base Capacity (vph)	129	1623	1477	232	1314	585	222	443	467	392	816		
Starvation Cap Reductn	0	0	0	22	883	72	0	0	0	0	0		
Spillback Cap Reductn	0	1014	0	0	0	0	0	0	6	0	0		
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	1.50	2.46	0.34	1.60	2.11	0.64	0.65	1.04	0.65	1.32	1.42		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 67 (56%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: O'Brien Hwy & Charlestown Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	170	1320	440	310	835	300	135	430	280	535	915	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	10	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1546	4868	1477	1636	3355	1463	1668	3323	1516	1518	3162	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1546	4868	1477	1636	3355	1463	1668	3323	1516	1518	3162	
Peak-hour factor, PHF	0.88	0.88	0.88	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	193	1500	500	337	908	326	145	462	301	575	984	113
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	193	1500	500	337	908	326	145	462	301	517	1155	0
Confl. Peds. (#/hr)	20		45	45		20	30		5	5		30
Heavy Vehicles (%)	9%	3%	3%	3%	4%	3%	1%	5%	3%	1%	3%	7%
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split		
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5	
Permitted Phases			Free									
Actuated Green, G (s)	9.0	39.0	120.0	16.0	46.0	46.0	15.0	15.0	36.0	30.0	30.0	
Effective Green, g (s)	10.0	40.0	120.0	17.0	47.0	48.0	16.0	16.0	37.0	31.0	31.0	
Actuated g/C Ratio	0.08	0.33	1.00	0.14	0.39	0.40	0.13	0.13	0.31	0.26	0.26	
Clearance Time (s)	5.0			5.0			5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0			3.0			3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	129	1623	1477	232	1314	585	222	443	467	392	817	
v/s Ratio Prot	c0.12	c0.31		c0.21	0.27	0.22	0.09	c0.14	0.20	0.34	c0.37	
v/s Ratio Perm			0.34									
v/c Ratio	1.50	0.92	0.34	1.45	0.69	0.56	0.65	1.04	0.64	1.32	1.41	
Uniform Delay, d1	55.0	38.5	0.0	51.5	30.4	27.8	49.4	52.0	35.8	44.5	44.5	
Progression Factor	1.00	1.00	1.00	1.42	1.66	0.63	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	259.5	9.3	0.6	215.0	0.8	0.6	6.7	54.4	3.0	160.5	193.4	
Delay (s)	314.5	47.8	0.6	288.3	51.2	18.0	56.1	106.4	38.9	205.0	237.9	
Level of Service	F	D	A	F	D	B	E	F	D	F	F	
Approach Delay (s)		60.5			95.2			76.0			227.7	
Approach LOS		E			F			E			F	

Intersection Summary			
HCM Average Control Delay	115.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Table 2
Signalized Intersection Capacity Analysis Summary
Weekday Evening

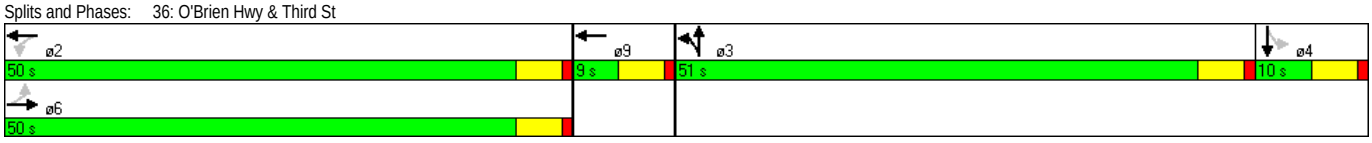
		2030 Build Alternative 1			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.89	63	E	
	EB LT-TH-RT	1.07	78	E	#621
	WB TH-RT	0.98	59	E	#701
	NB LT	0.75	39	D	407
	NB LT-TH-RT	0.73	39	D	401
	SB LT-TH-RT	0.07	59	E	11
O'Brien Highway at Water Street		0.65	18	B	
	EB LT	0.68	62	E	m248
	EB TH	0.34	1	A	m6
	WB TH-RT	0.60	14	B	m174
	SB RT	0.76	46	D	269
O'Brien Highway at First Street Extension		0.89	53	D	
	EB TH	0.73	16	B	143
	EB RT	0.17	5	A	20
	WB LT	0.86	66	E	#207
	WB TH-RT	1.06	87	F	#529
	NB LT	0.73	63	E	m192
	NB TH	0.77	64	E	m217
	SB LT-TH-RT	0.81	51	D	#326
Cambridge Street at First Street Extension		0.92	67	E	
	EB LT	0.59	45	D	188
	EB TH-RT	0.75	53	D	240
	NB LT-TH	1.13	140	F	#444
	NB RT	0.80	36	D	#550
	SB TH-RT	1.11	67	E	#371
O'Brien Highway at Charlestown Avenue		>1.20	>120	F	
	EB LT	>1.20	>120	F	#881
	EB TH	0.63	33	C	268
	EB RT	0.25	0	A	0
	WB LT	>1.20	>120	F	m#654
	WB TH	0.73	29	C	m343
	WB RT	1.06	116	F	m#458
	NEB LT	>1.20	>120	F	#603
	NEB TH	>1.20	>120	F	#856
	NEB RT	1.20	>120	F	#731
	SWB LT	1.01	104	F	#394
	SWB LT-TH-RT	>1.20	>120	F	#547

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø9
Lane Configurations													
Volume (vph)	1	1270	375	1	1395	1	875	1	30	1	1	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12	
Right Turn on Red			No			No			No			Yes	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		399			338			1431			198		
Travel Time (s)		9.1			7.7			32.5			4.5		
Confl. Peds. (#/hr)			140	140			15		110				
Peak Hour Factor	0.92	0.91	0.91	0.88	0.88	0.92	0.98	0.98	0.98	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	1%	4%	7%	1%	2%	1%	2%	0%	2%	2%	2%	
Shared Lane Traffic (%)							48%						
Lane Group Flow (vph)	0	1809	0	0	1587	0	464	461	0	0	3	0	
Turn Type	Perm			custom			Split			Perm			
Protected Phases		6			2 9		3	3			4		9
Permitted Phases	6			2						4			
Detector Phase	6	6		2	2 9		3	3		4	4		
Switch Phase													
Minimum Initial (s)	4.0	4.0		4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	22.0	22.0		22.0			22.0	22.0		11.0	11.0		9.0
Total Split (s)	50.0	50.0	0.0	50.0	59.0	0.0	51.0	51.0	0.0	10.0	10.0	0.0	9.0
Total Split (%)	41.7%	41.7%	0.0%	41.7%	49.2%	0.0%	42.5%	42.5%	0.0%	8.3%	8.3%	0.0%	8%
Yellow Time (s)	4.0	4.0		4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0	1.0		1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lead		Lag	Lag		
Lead-Lag Optimize?										Yes	Yes		
Recall Mode	C-Max	C-Max		C-Max			Max	Max		None	None		None
v/c Ratio		0.99			0.92		0.75	0.73			0.03		
Control Delay		52.7			45.8		40.3	39.4			49.0		
Queue Delay		6.9			0.8		0.0	7.8			0.0		
Total Delay		59.6			46.6		40.3	47.2			49.0		
Queue Length 50th (ft)		424			541		283	278			1		
Queue Length 95th (ft)		#621			#701		407	401			11		
Internal Link Dist (ft)		319			258			1351			118		
Turn Bay Length (ft)													
Base Capacity (vph)		1821			1730		621	629			90		
Starvation Cap Reductn		0			30		0	0			0		
Spillback Cap Reductn		47			0		0	130			0		
Storage Cap Reductn		0			0		0	0			0		
Reduced v/c Ratio		1.02			0.93		0.75	0.92			0.03		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: O'Brien Hwy & Third St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1270	375	1	1395	1	875	1	30	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91			0.95		0.95	0.95			1.00	
Frpb, ped/bikes		0.96			1.00		1.00	0.98			1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00			1.00	
Frt		0.97			1.00		1.00	0.99			0.95	
Flt Protected		1.00			1.00		0.95	0.96			0.98	
Satd. Flow (prot)		4562			3455		1585	1605			1750	
Flt Permitted		0.89			0.95		0.95	0.96			1.00	
Satd. Flow (perm)		4062			3296		1585	1605			1779	
Peak-hour factor, PHF	0.92	0.91	0.91	0.88	0.88	0.92	0.98	0.98	0.98	0.92	0.92	0.92
Adj. Flow (vph)	1	1396	412	1	1585	1	893	1	31	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	1809	0	0	1587	0	464	461	0	0	2	0
Confl. Peds. (#/hr)			140	140			15		110			
Heavy Vehicles (%)	2%	1%	4%	7%	1%	2%	1%	2%	0%	2%	2%	2%
Turn Type	Perm			custom			Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6			2						4		
Actuated Green, G (s)		49.0			58.0		46.0	46.0			1.0	
Effective Green, g (s)		50.0			59.0		47.0	47.0			2.0	
Actuated g/C Ratio		0.42			0.49		0.39	0.39			0.02	
Clearance Time (s)		5.0					5.0	5.0			5.0	
Vehicle Extension (s)		3.0					3.0	3.0			3.0	
Lane Grp Cap (vph)		1693			1621		621	629			30	
v/s Ratio Prot							c0.29	0.29				
v/s Ratio Perm		c0.45			c0.48						c0.00	
v/c Ratio		1.07			0.98		0.75	0.73			0.07	
Uniform Delay, d1		35.0			29.9		31.4	31.1			58.1	
Progression Factor		1.00			1.45		1.00	1.00			1.00	
Incremental Delay, d2		42.8			15.6		8.0	7.4			0.9	
Delay (s)		77.8			58.9		39.4	38.5			59.0	
Level of Service		E			E		D	D			E	
Approach Delay (s)		77.8			58.9			39.0			59.0	
Approach LOS		E			E			D			E	

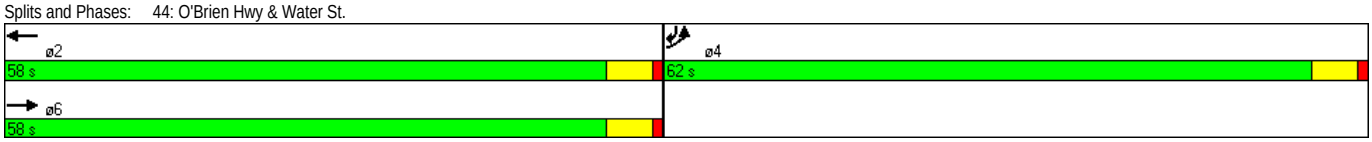
Intersection Summary			
HCM Average Control Delay	62.5	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

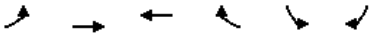
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	310	990	1080	80	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Peak Hour Factor	0.92	0.91	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	2%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	337	1088	1314	0	0	342
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	31.0	21.0			31.0
Total Split (s)	62.0	58.0	58.0	0.0	0.0	62.0
Total Split (%)	51.7%	48.3%	48.3%	0.0%	0.0%	51.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.68	0.34	0.60			0.76
Control Delay	61.5	0.6	15.5			49.2
Queue Delay	0.6	0.4	0.4			674.4
Total Delay	62.1	1.0	15.9			723.6
Queue Length 50th (ft)	246	5	172			212
Queue Length 95th (ft)	m248	m6	m174			269
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	827	3199	2203			753
Starvation Cap Reductn	218	1379	108			0
Spillback Cap Reductn	0	0	370			646
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.55	0.60	0.72			3.20

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 44: O'Brien Hwy & Water St.





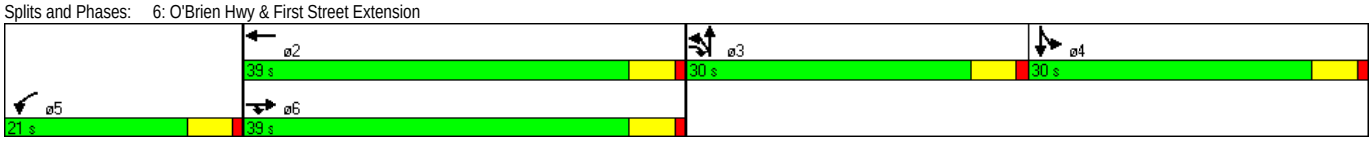
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	310	990	1080	80	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.91	0.95			1.00
Frt	1.00	1.00	0.99			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1711	4964	3419			1558
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1711	4964	3419			1558
Peak-hour factor, PHF	0.92	0.91	0.88	0.92	0.92	0.92
Adj. Flow (vph)	337	1088	1227	87	0	342
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	337	1088	1314	0	0	342
Heavy Vehicles (%)	2%	1%	1%	2%	2%	2%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	33.7	76.3	76.3			33.7
Effective Green, g (s)	34.7	77.3	77.3			34.7
Actuated g/C Ratio	0.29	0.64	0.64			0.29
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	495	3198	2202			451
v/s Ratio Prot	0.20	0.22	c0.38			c0.22
v/s Ratio Perm						
v/c Ratio	0.68	0.34	0.60			0.76
Uniform Delay, d1	37.7	9.7	12.3			38.8
Progression Factor	1.63	0.05	1.08			1.00
Incremental Delay, d2	1.0	0.1	0.5			7.2
Delay (s)	62.4	0.6	13.8			46.0
Level of Service	E	A	B			D
Approach Delay (s)		15.2	13.8		46.0	
Approach LOS		B	B		D	

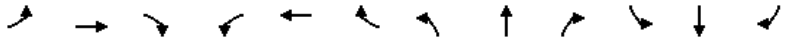
Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	950	120	350	885	55	205	235	0	180	375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)						10	515			1170		515
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1056	133	389	1044	0	228	261	0	0	650	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		30.0	30.0		30.0	30.0	
Total Split (s)	0.0	39.0	69.0	21.0	39.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	0.0%	32.5%	57.5%	17.5%	32.5%	0.0%	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		None	None		Max	Max	
v/c Ratio		0.73	0.17	0.86	1.06		0.73	0.77			0.81	
Control Delay		16.2	4.7	70.0	85.6		65.8	67.0			52.5	
Queue Delay		0.0	0.7	86.7	0.0		300.5	400.4			232.7	
Total Delay		16.2	5.4	156.6	85.6		366.3	467.4			285.2	
Queue Length 50th (ft)		153	29	135	~411		166	190			225	
Queue Length 95th (ft)		143	20	#207	#529		m192	m217			#326	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1439	831	454	989		358	390			802	
Starvation Cap Reductn		0	0	0	0		220	251			0	
Spillback Cap Reductn		0	466	126	0		0	0			373	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		0.73	0.36	1.19	1.06		1.65	1.88			1.52	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 28 (23%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 6: O'Brien Hwy & First Street Extension





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	950	120	350	885	55	205	235	0	180	375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91	1.00	0.97	0.95		1.00	1.00			0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00			0.98	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	1.00			0.99	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		4916	1531	3204	3381		1652	1801			3275	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		4916	1531	3204	3381		1652	1801			3275	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1056	133	389	983	61	228	261	0	200	417	33
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1056	133	389	1044	0	228	261	0	0	650	0
Confl. Peds. (#/hr)						10	515			1170		515
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		34.1	60.7	15.9	34.1		21.6	21.6			28.4	
Effective Green, g (s)		35.1	61.7	16.9	35.1		22.6	22.6			29.4	
Actuated g/C Ratio		0.29	0.51	0.14	0.29		0.19	0.19			0.24	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1438	787	451	989		311	339			802	
v/s Ratio Prot		0.21	0.09	c0.12	c0.31		0.14	c0.14			c0.20	
v/s Ratio Perm												
v/c Ratio		0.73	0.17	0.86	1.06		0.73	0.77			0.81	
Uniform Delay, d1		38.2	15.5	50.4	42.5		45.9	46.2			42.7	
Progression Factor		0.34	0.28	1.00	1.00		1.24	1.24			1.00	
Incremental Delay, d2		3.3	0.1	15.5	44.5		5.5	6.5			8.7	
Delay (s)		16.1	4.5	65.9	86.9		62.5	63.8			51.4	
Level of Service		B	A	E	F		E	E			D	
Approach Delay (s)		14.8			81.2			63.2			51.4	
Approach LOS		B			F			E			D	

Intersection Summary				
HCM Average Control Delay	52.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.89			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	73.2%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø4	ø8
Lane Configurations														
Volume (vph)	205	210	50	0	0	0	100	235	505	0	340	505		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	11	11	11	12	12	12		
Storage Length (ft)	170		0	0		0	0		0	0		0		
Storage Lanes	1		0	0		0	0		1	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			No		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		181			350			571			169			
Travel Time (s)		4.1			8.0			13.0			3.8			
Confl. Peds. (#/hr)			45				190		1170			190		
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.92	0.95	0.95	0.95	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	3%	6%	3%	2%	0%	2%	3%	2%	2%	2%		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	216	274	0	0	0	0	0	352	532	0	919	0		
Turn Type	Split						Split		custom					
Protected Phases	6	6					3	3	3 8		4 8		4	8
Permitted Phases														
Detector Phase	6	6					3	3	3 8		4 8			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0					4.0	4.0
Minimum Split (s)	23.0	23.0					10.0	10.0					17.0	20.0
Total Split (s)	38.0	38.0	0.0	0.0	0.0	0.0	25.0	25.0	48.0	0.0	57.0	0.0	34.0	23.0
Total Split (%)	31.7%	31.7%	0.0%	0.0%	0.0%	0.0%	20.8%	20.8%	40.0%	0.0%	47.5%	0.0%	28%	19%
Yellow Time (s)	4.0	4.0					4.0	4.0					4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0					1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	0.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag	Lag	Lag					Lag	Lag					Lead	Lead
Lead-Lag Optimize?							Yes	Yes						Yes
Recall Mode	None	None					None	None					C-Max	Max
v/c Ratio	0.59	0.75						1.13	0.80		1.11dr			
Control Delay	48.4	56.8						135.2	41.6		44.4			
Queue Delay	13.4	0.0						54.3	0.0		90.1			
Total Delay	61.8	56.8						189.5	41.6		134.5			
Queue Length 50th (ft)	134	177						~278	308		335			
Queue Length 95th (ft)	188	240						#444	#550		#371			
Internal Link Dist (ft)		101			270			491			89			
Turn Bay Length (ft)	170													
Base Capacity (vph)	485	485						312	663		991			
Starvation Cap Reductn	0	0						0	0		228			
Spillback Cap Reductn	243	0						32	0		0			
Storage Cap Reductn	0	0						0	0		0			
Reduced v/c Ratio	0.89	0.56						1.26	0.80		1.20			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 3 (3%), Referenced to phase 4:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: Cambridge St. & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	205	210	50	0	0	0	100	235	505	0	340	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	11	11	11	12	12	12
Total Lost time (s)	4.0	4.0						4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00						1.00	1.00		0.95	
Frpb, ped/bikes	1.00	0.98						1.00	1.00		0.64	
Flpb, ped/bikes	1.00	1.00						1.00	1.00		1.00	
Frt	1.00	0.97						1.00	0.85		0.91	
Flt Protected	0.95	1.00						0.99	1.00		1.00	
Satd. Flow (prot)	1711	1711						1785	1516		2071	
Flt Permitted	0.95	1.00						0.99	1.00		1.00	
Satd. Flow (perm)	1711	1711						1785	1516		2071	
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.92	0.95	0.95	0.95	0.92	0.92	0.92
Adj. Flow (vph)	216	221	53	0	0	0	105	247	532	0	370	549
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	216	274	0	0	0	0	0	352	532	0	919	0
Confl. Peds. (#/hr)			45				190		1170			190
Heavy Vehicles (%)	2%	2%	3%	6%	3%	2%	0%	2%	3%	2%	2%	2%
Turn Type	Split						Split		custom			
Protected Phases	6	6					3	3	3 8		4 8	
Permitted Phases												
Actuated Green, G (s)	24.6	24.6						20.0	51.4		55.4	
Effective Green, g (s)	25.6	25.6						21.0	52.4		57.4	
Actuated g/C Ratio	0.21	0.21						0.18	0.44		0.48	
Clearance Time (s)	5.0	5.0						5.0				
Vehicle Extension (s)	3.0	3.0						3.0				
Lane Grp Cap (vph)	365	365						312	662		991	
v/s Ratio Prot	0.13	c0.16						c0.20	0.35		c0.44	
v/s Ratio Perm												
v/c Ratio	0.59	0.75						1.13	0.80		1.11dr	
Uniform Delay, d1	42.5	44.2						49.5	29.3		29.3	
Progression Factor	1.00	1.00						1.00	1.00		1.88	
Incremental Delay, d2	2.6	8.4						90.2	7.0		11.3	
Delay (s)	45.1	52.6						139.7	36.3		66.5	
Level of Service	D	D						F	D		E	
Approach Delay (s)		49.3			0.0			77.5			66.5	
Approach LOS		D			A			E			E	

Intersection Summary			
HCM Average Control Delay	67.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

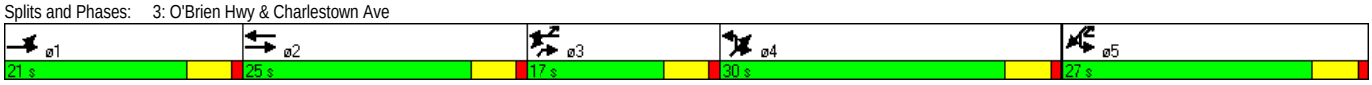
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	ø2
Lane Configurations													
Volume (vph)	540	980	330	380	710	420	430	1225	585	300	520	245	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	11	11	10	11	10	10	11	11	10	11	11	
Storage Length (ft)	350		200	0		0	0		0	120		0	
Storage Lanes	1		1	1		1	1		1	1		0	
Taper Length (ft)	25		25	25		25	25		25	25		25	
Right Turn on Red			No			No			No			No	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		415			243			462			1068		
Travel Time (s)		9.4			5.5			10.5			24.3		
Confl. Peds. (#/hr)	50		75	75		50	50		15	15		50	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.94	0.94	0.94	
Heavy Vehicles (%)	1%	1%	2%	1%	2%	3%	1%	1%	2%	3%	1%	0%	
Shared Lane Traffic (%)										10%			
Lane Group Flow (vph)	600	1089	367	422	789	467	483	1376	657	287	846	0	
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split			
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5		2
Permitted Phases			Free										
Detector Phase	1	1 2		3	2 3	3 5	4	4	3 4	5	5		
Switch Phase													
Minimum Initial (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	21.0			10.0			10.0	10.0		27.0	27.0		18.0
Total Split (s)	21.0	46.0	0.0	17.0	42.0	44.0	30.0	30.0	47.0	27.0	27.0	0.0	25.0
Total Split (%)	17.5%	38.3%	0.0%	14.2%	35.0%	36.7%	25.0%	25.0%	39.2%	22.5%	22.5%	0.0%	21%
Yellow Time (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0			1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead			Lead			Lag	Lag					Lag
Lead-Lag Optimize?	Yes			Yes			Yes	Yes					Yes
Recall Mode	None			C-Max			None	None		None	None		None
v/c Ratio	2.54	0.63	0.25	2.33	0.73	1.06	1.34	1.84	1.20	1.01	1.44		
Control Delay	728.7	34.4	0.4	633.1	30.4	94.4	207.3	410.7	140.5	103.8	243.1		
Queue Delay	0.0	0.0	0.0	0.0	196.2	12.2	0.0	0.0	151.8	0.0	0.0		
Total Delay	728.7	34.4	0.4	633.1	226.6	106.5	207.3	410.7	292.3	103.8	243.1		
Queue Length 50th (ft)	~683	224	0	~480	283	~277	~429	~747	~543	~218	~430		
Queue Length 95th (ft)	#881	268	0	m#654	m343	m#458	#603	#856	#731	#394	#547		
Internal Link Dist (ft)		335			163			382			988		
Turn Bay Length (ft)	350		200							120			
Base Capacity (vph)	236	1737	1478	181	1083	439	361	749	549	285	588		
Starvation Cap Reductn	0	0	0	0	532	13	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0	0	0	122	0	0		
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	2.54	0.63	0.25	2.33	1.43	1.10	1.34	1.84	1.54	1.01	1.44		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 67 (56%), Referenced to phase 3:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: O'Brien Hwy & Charlestown Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	540	980	330	380	710	420	430	1225	585	300	520	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	10	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1668	4964	1478	1668	3421	1463	1668	3455	1531	1488	3068	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1668	4964	1478	1668	3421	1463	1668	3455	1531	1488	3068	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.94	0.94	0.94
Adj. Flow (vph)	600	1089	367	422	789	467	483	1376	657	319	553	261
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	600	1089	367	422	789	467	483	1376	657	287	846	0
Confl. Peds. (#/hr)	50		75	75		50	50		15	15		50
Heavy Vehicles (%)	1%	1%	2%	1%	2%	3%	1%	1%	2%	3%	1%	0%
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split		
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5	
Permitted Phases			Free									
Actuated Green, G (s)	16.0	41.0	120.0	12.0	37.0	34.0	25.0	25.0	42.0	22.0	22.0	
Effective Green, g (s)	17.0	42.0	120.0	13.0	38.0	36.0	26.0	26.0	43.0	23.0	23.0	
Actuated g/C Ratio	0.14	0.35	1.00	0.11	0.32	0.30	0.22	0.22	0.36	0.19	0.19	
Clearance Time (s)	5.0			5.0			5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0			3.0			3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	236	1737	1478	181	1083	439	361	749	549	285	588	
v/s Ratio Prot	c0.36	0.22		c0.25	c0.23	0.32	0.29	c0.40	0.43	0.19	c0.28	
v/s Ratio Perm			0.25									
v/c Ratio	2.54	0.63	0.25	2.33	0.73	1.06	1.34	1.84	1.20	1.01	1.44	
Uniform Delay, d1	51.5	32.5	0.0	53.5	36.4	42.0	47.0	47.0	38.5	48.5	48.5	
Progression Factor	1.00	1.00	1.00	0.83	0.75	1.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	706.4	0.7	0.4	610.3	1.6	52.8	169.8	381.9	105.3	55.1	207.0	
Delay (s)	757.9	33.2	0.4	654.8	28.9	116.1	216.8	428.9	143.8	103.6	255.5	
Level of Service	F	C	A	F	C	F	F	F	F	F	F	
Approach Delay (s)		238.8			210.6			313.7			217.0	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	254.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	118.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Table 3
Signalized Intersection Capacity Analysis Summary
Weekday Morning

		2030 Interim Build			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.79	26	C	
	EB LT-TH-RT	0.97	29	C	#784
	WB TH-RT	0.23	3	A	0
	NB LT	0.35	46	D	113
	NB LT-TH-RT	0.35	46	D	110
O'Brien Highway at Water Street		0.60	25	C	
	EB LT	0.73	46	D	m186
	EB TH	0.55	14	B	m286
	WB TH-RT	0.35	47	D	249
	SB LT-RT	0.59	45	D	178
O'Brien Highway at First Street Extension		0.66	50	D	
	EB TH	0.98	61	E	#583
	EB RT	0.23	18	B	154
	WB LT	0.76	51	D	207
	WB TH-RT	0.46	31	C	207
	NB LT	0.10	9	A	11
	NB TH	0.07	8	A	m9
	SB LT-TH-RT	0.34	48	D	78
Cambridge Street at First Street Extension		0.70	29	C	
	EB LT	0.03	36	D	18
	EB TH-RT	0.78	55	D	238
	NB LT-TH	0.56	53	D	106
	NB RT	0.26	25	C	91
	SB TH-RT	0.96	17	B	#182
O'Brien Highway at Charlestown Avenue		1.15	101	F	
	EB LT	>1.20	>120	F	#268
	EB TH	0.93	48	D	#411
	EB RT	0.33	1	A	0
	WB LT	>1.20	>120	F	#438
	WB TH	0.67	56	E	397
	WB RT	0.50	20	C	140
	NEB LT	0.36	48	D	96
	NEB TH	1.04	106	F	#275
	NEB RT	0.54	36	D	219
	SWB LT	>1.20	>120	F	#700
	SWB LT-TH-RT	>1.20	>120	F	#641

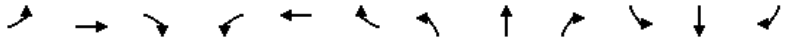
Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	5	2000	655	0	495	15	165	0	15	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Confl. Peds. (#/hr)			135	135			10		110					
Peak Hour Factor	0.92	0.95	0.95	0.93	0.93	0.92	0.91	0.90	0.91	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	3%	3%	13%	11%	2%	4%	2%	0%	2%	2%	2%		
Shared Lane Traffic (%)							45%							
Lane Group Flow (vph)	0	2799	0	0	548	0	100	97	0	0	0	0		
Turn Type	Perm						Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6									4				
Detector Phase	6	6			2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0		4.0	4.0		4.0	4.0
Minimum Split (s)	23.0	23.0					23.0	23.0		10.0	10.0		9.0	9.0
Total Split (s)	75.0	75.0	0.0	0.0	84.0	0.0	26.0	26.0	0.0	10.0	10.0	0.0	75.0	9.0
Total Split (%)	62.5%	62.5%	0.0%	0.0%	70.0%	0.0%	21.7%	21.7%	0.0%	8.3%	8.3%	0.0%	63%	8%
Yellow Time (s)	4.0	4.0					4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max					Max	Max		None	None		C-Max	None
v/c Ratio		0.97			0.23		0.35	0.35						
Control Delay		30.7			3.3		47.0	46.9						
Queue Delay		9.8			0.2		0.0	0.0						
Total Delay		40.4			3.6		47.0	46.9						
Queue Length 50th (ft)		603			0		63	61						
Queue Length 95th (ft)		#784			0		113	110						
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)														
Base Capacity (vph)		2875			2354		282	279						
Starvation Cap Reductn		0			1078		0	0						
Spillback Cap Reductn		128			0		0	0						
Storage Cap Reductn		0			0		0	0						
Reduced v/c Ratio		1.02			0.43		0.35	0.35						

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: O'Brien Hwy & Third St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	2000	655	0	495	15	165	0	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.91			0.95		0.95	0.95				
Frpb, ped/bikes		0.97			1.00		1.00	0.96				
Flpb, ped/bikes		1.00			1.00		1.00	1.00				
Frt		0.96			1.00		1.00	0.98				
Flt Protected		1.00			1.00		0.95	0.96				
Satd. Flow (prot)		4552			3138		1539	1521				
Flt Permitted		0.94			1.00		0.95	0.96				
Satd. Flow (perm)		4276			3138		1539	1521				
Peak-hour factor, PHF	0.92	0.95	0.95	0.93	0.93	0.92	0.91	0.90	0.91	0.92	0.92	0.92
Adj. Flow (vph)	5	2105	689	0	532	16	181	0	16	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	2799	0	0	548	0	100	97	0	0	0	0
Confl. Peds. (#/hr)			135	135			10		110			
Heavy Vehicles (%)	2%	3%	3%	13%	11%	2%	4%	2%	0%	2%	2%	2%
Turn Type	Perm						Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6									4		
Actuated Green, G (s)		80.0			89.0		21.0	21.0				
Effective Green, g (s)		81.0			90.0		22.0	22.0				
Actuated g/C Ratio		0.68			0.75		0.18	0.18				
Clearance Time (s)		5.0					5.0	5.0				
Vehicle Extension (s)		3.0					3.0	3.0				
Lane Grp Cap (vph)		2886			2354		282	279				
v/s Ratio Prot					c0.17		c0.06	0.06				
v/s Ratio Perm		c0.65										
v/c Ratio		0.97			0.23		0.35	0.35				
Uniform Delay, d1		18.4			4.5		42.8	42.7				
Progression Factor		1.00			0.67		1.00	1.00				
Incremental Delay, d2		11.1			0.0		3.5	3.4				
Delay (s)		29.4			3.1		46.3	46.1				
Level of Service		C			A		D	D				
Approach Delay (s)		29.4			3.1			46.2			0.0	
Approach LOS		C			A			D			A	

Intersection Summary				
HCM Average Control Delay	26.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.1%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

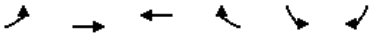
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	225	1790	405	80	65	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Confl. Peds. (#/hr)					320	
Peak Hour Factor	0.92	0.95	0.93	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	11%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	245	1884	522	0	185	0
Turn Type	Prot					
Protected Phases	1	6	2			
Permitted Phases					4	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	29.0	28.0	18.0		31.0	
Total Split (s)	37.0	75.0	38.0	0.0	45.0	0.0
Total Split (%)	30.8%	62.5%	31.7%	0.0%	37.5%	0.0%
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	5.0	3.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?			Yes			
Recall Mode	None	C-Max	C-Max		Ped	
v/c Ratio	0.73	0.55	0.35		0.59	
Control Delay	46.6	14.4	50.7		50.1	
Queue Delay	0.4	11.2	0.0		0.0	
Total Delay	47.0	25.6	50.7		50.1	
Queue Length 50th (ft)	180	272	191		115	
Queue Length 95th (ft)	m186	m286	249		178	
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	471	3421	1473		472	
Starvation Cap Reductn	41	1537	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.57	1.00	0.35		0.39	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	225	1790	405	80	65	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0		5.0	
Lane Util. Factor	1.00	0.91	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		0.87	
Frt	1.00	1.00	0.97		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1711	4868	3107		1415	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1711	4868	3107		1415	
Peak-hour factor, PHF	0.92	0.95	0.93	0.92	0.92	0.92
Adj. Flow (vph)	245	1884	435	87	71	114
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	245	1884	522	0	185	0
Confl. Peds. (#/hr)					320	
Heavy Vehicles (%)	2%	3%	11%	2%	2%	2%
Turn Type	Prot					
Protected Phases	1	6	2			
Permitted Phases					4	
Actuated Green, G (s)	22.4	83.3	55.9		26.7	
Effective Green, g (s)	23.4	84.3	56.9		26.7	
Actuated g/C Ratio	0.19	0.70	0.47		0.22	
Clearance Time (s)	5.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	334	3420	1473		315	
v/s Ratio Prot	c0.14	c0.39	0.17			
v/s Ratio Perm					c0.13	
v/c Ratio	0.73	0.55	0.35		0.59	
Uniform Delay, d1	45.4	8.7	19.9		41.7	
Progression Factor	0.95	1.61	2.35		1.00	
Incremental Delay, d2	2.5	0.2	0.6		2.8	
Delay (s)	45.7	14.1	47.4		44.5	
Level of Service	D	B	D		D	
Approach Delay (s)		17.8	47.4		44.5	
Approach LOS		B	D		D	

Intersection Summary			
HCM Average Control Delay	25.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

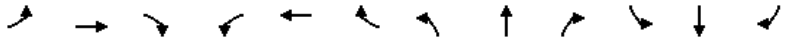
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1555	175	440	440	55	25	20	0	55	65	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)						10	340			675		340
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1728	194	489	550	0	28	22	0	0	150	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		24.0	24.0		21.0	21.0	
Total Split (s)	0.0	43.0	67.0	32.0	43.0	0.0	24.0	24.0	0.0	21.0	21.0	0.0
Total Split (%)	0.0%	35.8%	55.8%	26.7%	35.8%	0.0%	20.0%	20.0%	0.0%	17.5%	17.5%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		Max	Max		Max	Max	
v/c Ratio		0.98	0.23	0.76	0.46		0.10	0.07			0.34	
Control Delay		61.3	18.8	53.4	31.8		8.7	8.3			48.8	
Queue Delay		0.0	0.2	0.0	0.0		0.0	0.0			0.6	
Total Delay		61.3	19.1	53.4	31.8		8.7	8.3			49.4	
Queue Length 50th (ft)		460	69	162	151		4	3			48	
Queue Length 95th (ft)		#583	154	207	207		11	m9			78	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1762	855	748	1198		275	300			446	
Starvation Cap Reductn		0	0	0	0		0	0			0	
Spillback Cap Reductn		0	245	0	0		0	0			105	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		0.98	0.32	0.65	0.46		0.10	0.07			0.44	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 31 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 6: O'Brien Hwy & First Street Extension





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1555	175	440	440	55	25	20	0	55	65	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91	1.00	0.97	0.95		1.00	1.00			0.95	
Frpb, ped/bikes		1.00	1.00	1.00	0.99		1.00	1.00			0.95	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.98		1.00	1.00			0.98	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		4916	1531	3204	3345		1652	1801			3148	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		4916	1531	3204	3345		1652	1801			3148	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1728	194	489	489	61	28	22	0	61	72	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1728	194	489	550	0	28	22	0	0	150	0
Confl. Peds. (#/hr)						10	340			675		340
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		42.0	66.0	23.0	42.0		19.0	19.0			16.0	
Effective Green, g (s)		43.0	67.0	24.0	43.0		20.0	20.0			17.0	
Actuated g/C Ratio		0.36	0.56	0.20	0.36		0.17	0.17			0.14	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1762	855	641	1199		275	300			446	
v/s Ratio Prot		c0.35	c0.13	c0.15	0.16		0.02	0.01			c0.05	
v/s Ratio Perm												
v/c Ratio		0.98	0.23	0.76	0.46		0.10	0.07			0.34	
Uniform Delay, d1		38.1	13.4	45.3	29.6		42.4	42.2			46.4	
Progression Factor		1.19	1.27	1.00	1.00		0.19	0.19			1.00	
Incremental Delay, d2		16.0	0.5	5.4	1.3		0.7	0.5			2.0	
Delay (s)		61.4	17.6	50.7	30.8		8.6	8.3			48.4	
Level of Service		E	B	D	C		A	A			D	
Approach Delay (s)		57.0			40.2			8.5			48.4	
Approach LOS		E			D			A			D	

Intersection Summary			
HCM Average Control Delay	50.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø4	ø8
Lane Configurations														
Volume (vph)	10	195	45	0	0	0	55	35	100	0	210	470		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	11	11	10	12	12	12		
Storage Length (ft)	170		0	0		0	0		0	0		0		
Storage Lanes	1		0	0		0	0		1	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			No		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		181			350			571			169			
Travel Time (s)		4.1			8.0			13.0			3.8			
Confl. Peds. (#/hr)			80				125		645			125		
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.92	0.80	0.80	0.80	0.90	0.90	0.90		
Heavy Vehicles (%)	2%	10%	9%	10%	5%	2%	17%	2%	24%	2%	2%	2%		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	11	276	0	0	0	0	0	113	125	0	755	0		
Turn Type	Split						Split		custom					
Protected Phases	6	6					3	3	3 8		4 8		4	8
Permitted Phases														
Detector Phase	6	6					3	3	3 8		4 8			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0					4.0	4.0
Minimum Split (s)	23.0	23.0					10.0	10.0					15.0	20.0
Total Split (s)	38.0	38.0	0.0	0.0	0.0	0.0	25.0	25.0	48.0	0.0	57.0	0.0	34.0	23.0
Total Split (%)	31.7%	31.7%	0.0%	0.0%	0.0%	0.0%	20.8%	20.8%	40.0%	0.0%	47.5%	0.0%	28%	19%
Yellow Time (s)	4.0	4.0					4.0	4.0					4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0					1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	0.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag	Lag	Lag					Lead	Lead					Lead	Lag
Lead-Lag Optimize?							Yes	Yes						Yes
Recall Mode	None	None					None	None					C-Max	None
v/c Ratio	0.03	0.78						0.56	0.26		0.96dr			
Control Delay	33.1	59.0						59.4	26.8		21.1			
Queue Delay	0.0	0.0						0.0	0.0		4.1			
Total Delay	33.1	59.0						59.4	26.8		25.2			
Queue Length 50th (ft)	6	177						74	54		80			
Queue Length 95th (ft)	18	238						106	91		#182			
Internal Link Dist (ft)		101			270			491			89			
Turn Bay Length (ft)	170													
Base Capacity (vph)	485	446						281	472		1072			
Starvation Cap Reductn	0	0						0	0		234			
Spillback Cap Reductn	0	0						0	0		0			
Storage Cap Reductn	0	0						0	0		0			
Reduced v/c Ratio	0.02	0.62						0.40	0.26		0.90			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 2 (2%), Referenced to phase 4:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: Cambridge St. & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	195	45	0	0	0	55	35	100	0	210	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	11	11	10	12	12	12
Total Lost time (s)	4.0	4.0						4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00						1.00	1.00		0.95	
Frpb, ped/bikes	1.00	0.97						1.00	1.00		0.61	
Flpb, ped/bikes	1.00	1.00						1.00	1.00		1.00	
Frt	1.00	0.97						1.00	0.85		0.90	
Flt Protected	0.95	1.00						0.97	1.00		1.00	
Satd. Flow (prot)	1711	1574						1603	1216		1946	
Flt Permitted	0.95	1.00						0.97	1.00		1.00	
Satd. Flow (perm)	1711	1574						1603	1216		1946	
Peak-hour factor, PHF	0.87	0.87	0.87	0.83	0.83	0.92	0.80	0.80	0.80	0.90	0.90	0.90
Adj. Flow (vph)	11	224	52	0	0	0	69	44	125	0	233	522
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	11	276	0	0	0	0	0	113	125	0	755	0
Confl. Peds. (#/hr)			80				125		645			125
Heavy Vehicles (%)	2%	10%	9%	10%	5%	2%	17%	2%	24%	2%	2%	2%
Turn Type	Split						Split		custom			
Protected Phases	6	6					3	3	3 8		4 8	
Permitted Phases												
Actuated Green, G (s)	25.9	25.9						14.0	45.6		65.1	
Effective Green, g (s)	26.9	26.9						15.0	46.6		66.1	
Actuated g/C Ratio	0.22	0.22						0.12	0.39		0.55	
Clearance Time (s)	5.0	5.0						5.0				
Vehicle Extension (s)	3.0	3.0						3.0				
Lane Grp Cap (vph)	384	353						200	472		1072	
v/s Ratio Prot	0.01	c0.18						c0.07	0.10		c0.39	
v/s Ratio Perm												
v/c Ratio	0.03	0.78						0.56	0.26		0.96dr	
Uniform Delay, d1	36.3	43.8						49.4	25.0		19.8	
Progression Factor	1.00	1.00						1.00	1.00		0.76	
Incremental Delay, d2	0.0	10.7						3.6	0.3		1.9	
Delay (s)	36.4	54.5						53.1	25.3		16.9	
Level of Service	D	D						D	C		B	
Approach Delay (s)		53.8			0.0			38.5			16.9	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM Average Control Delay	29.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	ø2
Lane Configurations													
Volume (vph)	150	1325	430	280	810	270	75	430	235	530	915	35	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	11	11	10	11	10	10	11	11	10	11	11	
Storage Length (ft)	350		200	0		0	0		0	120		0	
Storage Lanes	1		1	1		1	1		1	1		0	
Taper Length (ft)	25		25	25		25	25		25	25		25	
Right Turn on Red			No			No			No			No	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		415			243			462			1068		
Travel Time (s)		9.4			5.5			10.5			24.3		
Confl. Peds. (#/hr)	20		45	45		20	30		5	5		30	
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93	
Heavy Vehicles (%)	9%	3%	3%	3%	4%	3%	1%	5%	3%	1%	3%	7%	
Shared Lane Traffic (%)										10%			
Lane Group Flow (vph)	170	1506	489	304	880	293	81	462	253	513	1079	0	
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split			
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5		2
Permitted Phases			Free										
Detector Phase	1	1 2		3	2 3	3 5	4	4	3 4	5	5		
Switch Phase													
Minimum Initial (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	14.0			9.0			10.0	10.0		27.0	27.0		18.0
Total Split (s)	14.0	44.0	0.0	21.0	51.0	56.0	20.0	20.0	41.0	35.0	35.0	0.0	30.0
Total Split (%)	11.7%	36.7%	0.0%	17.5%	42.5%	46.7%	16.7%	16.7%	34.2%	29.2%	29.2%	0.0%	25%
Yellow Time (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0			1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead			Lead			Lag	Lag					Lag
Lead-Lag Optimize?	Yes			Yes			Yes	Yes					Yes
Recall Mode	None			None			None	None		None	None		C-Max
v/c Ratio	1.32	0.93	0.33	1.31	0.67	0.50	0.36	1.04	0.54	1.31	1.30		
Control Delay	230.0	49.7	0.6	216.8	57.3	14.0	52.7	104.7	39.7	193.0	180.8		
Queue Delay	0.0	250.7	0.0	60.6	485.6	0.4	0.0	0.0	0.0	0.0	0.0		
Total Delay	230.0	300.4	0.6	277.3	542.9	14.3	52.7	104.7	39.7	193.0	180.8		
Queue Length 50th (ft)	~150	361	0	~275	338	106	51	~179	143	~494	~517		
Queue Length 95th (ft)	#268	#411	0	#438	397	140	96	#275	219	#700	#641		
Internal Link Dist (ft)		335			163			382			988		
Turn Bay Length (ft)	350		200							120			
Base Capacity (vph)	129	1623	1477	232	1314	585	222	443	467	392	830		
Starvation Cap Reductn	0	0	0	22	890	59	0	0	0	0	0		
Spillback Cap Reductn	0	659	0	0	0	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	1.32	1.56	0.33	1.45	2.08	0.56	0.36	1.04	0.54	1.31	1.30		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 67 (56%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: O'Brien Hwy & Charlestown Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	150	1325	430	280	810	270	75	430	235	530	915	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	10	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1546	4868	1477	1636	3355	1463	1668	3323	1516	1518	3212	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1546	4868	1477	1636	3355	1463	1668	3323	1516	1518	3212	
Peak-hour factor, PHF	0.88	0.88	0.88	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	170	1506	489	304	880	293	81	462	253	570	984	38
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	170	1506	489	304	880	293	81	462	253	513	1079	0
Confl. Peds. (#/hr)	20		45	45		20	30		5	5		30
Heavy Vehicles (%)	9%	3%	3%	3%	4%	3%	1%	5%	3%	1%	3%	7%
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split		
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5	
Permitted Phases			Free									
Actuated Green, G (s)	9.0	39.0	120.0	16.0	46.0	46.0	15.0	15.0	36.0	30.0	30.0	
Effective Green, g (s)	10.0	40.0	120.0	17.0	47.0	48.0	16.0	16.0	37.0	31.0	31.0	
Actuated g/C Ratio	0.08	0.33	1.00	0.14	0.39	0.40	0.13	0.13	0.31	0.26	0.26	
Clearance Time (s)	5.0			5.0			5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0			3.0			3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	129	1623	1477	232	1314	585	222	443	467	392	830	
v/s Ratio Prot	c0.11	c0.31		c0.19	0.26	0.20	0.05	c0.14	0.17	c0.34	0.34	
v/s Ratio Perm			0.33									
v/c Ratio	1.32	0.93	0.33	1.31	0.67	0.50	0.36	1.04	0.54	1.31	1.30	
Uniform Delay, d1	55.0	38.6	0.0	51.5	30.1	27.0	47.4	52.0	34.5	44.5	44.5	
Progression Factor	1.00	1.00	1.00	1.50	1.81	0.74	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	187.2	9.6	0.6	161.7	1.0	0.5	1.0	54.4	1.3	156.2	143.8	
Delay (s)	242.2	48.2	0.6	238.9	55.5	20.4	48.4	106.4	35.7	200.7	188.3	
Level of Service	F	D	A	F	E	C	D	F	D	F	F	
Approach Delay (s)		52.7			86.3			78.0			192.3	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM Average Control Delay	101.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Table 4
Signalized Intersection Capacity Analysis Summary
Weekday Evening

		2030 Interim Build			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.74	30	C	
	EB LT-TH-RT	0.77	30	C	390
	WB TH-RT	0.70	25	C	229
	NB LT	0.73	39	D	395
	NB LT-TH-RT	0.71	37	D	385
O'Brien Highway at Water Street		0.63	18	B	
	EB LT	0.64	77	E	m115
	EB TH	0.32	0	A	2
	WB TH-RT	0.75	24	C	m222
	SB LT-RT	0.37	40	D	131
O'Brien Highway at First Street Extension		0.71	46	D	
	EB TH	0.76	20	B	234
	EB RT	0.17	7	A	58
	WB LT	0.84	64	E	#197
	WB TH-RT	0.99	68	E	#481
	NB LT	0.79	74	E	m219
	NB TH	0.23	59	E	m77
	SB LT-TH-RT	0.25	37	D	85
Cambridge Street at First Street Extension		0.77	44	D	
	EB LT	0.34	42	D	109
	EB TH-RT	0.74	53	D	231
	NB LT-TH	0.91	78	E	#335
	NB RT	0.81	36	D	#546
	SB TH-RT	0.61	29	C	m101
O'Brien Highway at Charlestown Avenue		>1.20	>120	F	
	EB LT	>1.20	>120	F	#804
	EB TH	0.63	33	C	270
	EB RT	0.22	0	A	0
	WB LT	>1.20	>120	F	#597
	WB TH	0.70	36	D	334
	WB RT	0.96	71	E	#375
	NEB LT	1.20	>120	F	#527
	NEB TH	>1.20	>120	F	#856
	NEB RT	1.14	120	F	#683
	SWB LT	0.99	100	F	#389
	SWB LT-TH-RT	>1.20	>120	F	#501

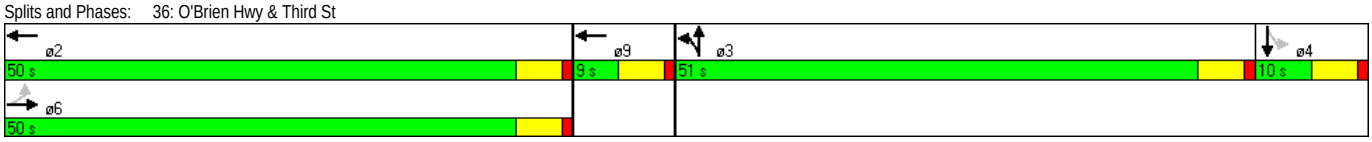
Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	0	1115	375	0	1145	0	870	0	15	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Confl. Peds. (#/hr)			140	140			15		110					
Peak Hour Factor	0.92	0.91	0.91	0.88	0.88	0.92	0.98	0.98	0.98	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	1%	4%	7%	1%	2%	1%	2%	0%	2%	2%	2%		
Shared Lane Traffic (%)							49%							
Lane Group Flow (vph)	0	1637	0	0	1301	0	453	450	0	0	0	0		
Turn Type	Perm						Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6									4				
Detector Phase	6	6			2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0		4.0	4.0		4.0	4.0
Minimum Split (s)	22.0	22.0					23.0	23.0		10.0	10.0		22.0	9.0
Total Split (s)	50.0	50.0	0.0	0.0	59.0	0.0	51.0	51.0	0.0	10.0	10.0	0.0	50.0	9.0
Total Split (%)	41.7%	41.7%	0.0%	0.0%	49.2%	0.0%	42.5%	42.5%	0.0%	8.3%	8.3%	0.0%	42%	8%
Yellow Time (s)	4.0	4.0					4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max					Max	Max		None	None		C-Max	None
v/c Ratio		0.78			0.70		0.73	0.71						
Control Delay		30.1			26.0		39.3	37.9						
Queue Delay		0.0			0.5		0.0	0.0						
Total Delay		30.1			26.5		39.3	37.9						
Queue Length 50th (ft)		334			235		273	268						
Queue Length 95th (ft)		390			229		395	385						
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)														
Base Capacity (vph)		2101			1871		621	638						
Starvation Cap Reductn		0			198		0	0						
Spillback Cap Reductn		0			0		0	0						
Storage Cap Reductn		0			0		0	0						
Reduced v/c Ratio		0.78			0.78		0.73	0.71						

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 36: O'Brien Hwy & Third St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1115	375	0	1145	0	870	0	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.91			0.95		0.95	0.95				
Frpb, ped/bikes		0.96			1.00		1.00	0.99				
Flpb, ped/bikes		1.00			1.00		1.00	1.00				
Frt		0.96			1.00		1.00	0.99				
Flt Protected		1.00			1.00		0.95	0.95				
Satd. Flow (prot)		4542			3455		1585	1628				
Flt Permitted		1.00			1.00		0.95	0.95				
Satd. Flow (perm)		4542			3455		1585	1628				
Peak-hour factor, PHF	0.92	0.91	0.91	0.88	0.88	0.92	0.98	0.98	0.98	0.92	0.92	0.92
Adj. Flow (vph)	0	1225	412	0	1301	0	888	0	15	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1637	0	0	1301	0	453	450	0	0	0	0
Confl. Peds. (#/hr)			140	140			15		110			
Heavy Vehicles (%)	2%	1%	4%	7%	1%	2%	1%	2%	0%	2%	2%	2%
Turn Type	Perm						Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6									4		
Actuated Green, G (s)		55.0			64.0		46.0	46.0				
Effective Green, g (s)		56.0			65.0		47.0	47.0				
Actuated g/C Ratio		0.47			0.54		0.39	0.39				
Clearance Time (s)		5.0					5.0	5.0				
Vehicle Extension (s)		3.0					3.0	3.0				
Lane Grp Cap (vph)		2120			1871		621	638				
v/s Ratio Prot		c0.36			c0.38		c0.29	0.28				
v/s Ratio Perm												
v/c Ratio		0.77			0.70		0.73	0.71				
Uniform Delay, d1		26.7			20.2		31.1	30.7				
Progression Factor		1.00			1.19		1.00	1.00				
Incremental Delay, d2		2.8			0.8		7.4	6.4				
Delay (s)		29.5			24.9		38.5	37.1				
Level of Service		C			C		D	D				
Approach Delay (s)		29.5			24.9			37.8			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM Average Control Delay	29.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

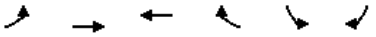
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	145	985	1055	75	35	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Confl. Peds. (#/hr)					370	
Peak Hour Factor	0.92	0.91	0.88	0.92	0.92	0.92
Heavy Vehicles (%)	2%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	158	1082	1281	0	136	0
Turn Type	Prot					
Protected Phases	1	6	2			
Permitted Phases					4	
Detector Phase	1	6	2		4	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	28.0	28.0	18.0		31.0	
Total Split (s)	30.0	85.0	55.0	0.0	35.0	0.0
Total Split (%)	25.0%	70.8%	45.8%	0.0%	29.2%	0.0%
Yellow Time (s)	4.0	4.0	4.0		4.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	5.0	3.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	C-Max	C-Max		Max	
v/c Ratio	0.64	0.32	0.75		0.37	
Control Delay	80.2	0.4	24.9		40.9	
Queue Delay	0.0	0.2	0.0		0.0	
Total Delay	80.2	0.6	25.0		40.9	
Queue Length 50th (ft)	101	2	210		77	
Queue Length 95th (ft)	m115	2	m222		131	
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	371	3351	1699		363	
Starvation Cap Reductn	0	1276	12		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.43	0.52	0.76		0.37	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	145	985	1055	75	35	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0		5.0	
Lane Util. Factor	1.00	0.91	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		0.90	
Frt	1.00	1.00	0.99		0.90	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1711	4964	3420		1450	
Flt Permitted	0.95	1.00	1.00		0.99	
Satd. Flow (perm)	1711	4964	3420		1450	
Peak-hour factor, PHF	0.92	0.91	0.88	0.92	0.92	0.92
Adj. Flow (vph)	158	1082	1199	82	38	98
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	158	1082	1281	0	136	0
Confl. Peds. (#/hr)					370	
Heavy Vehicles (%)	2%	1%	1%	2%	2%	2%
Turn Type	Prot					
Protected Phases	1	6	2			
Permitted Phases					4	
Actuated Green, G (s)	16.3	80.0	58.7		30.0	
Effective Green, g (s)	17.3	81.0	59.7		30.0	
Actuated g/C Ratio	0.14	0.68	0.50		0.25	
Clearance Time (s)	5.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	247	3351	1701		363	
v/s Ratio Prot	c0.09	0.22	c0.37			
v/s Ratio Perm					c0.09	
v/c Ratio	0.64	0.32	0.75		0.37	
Uniform Delay, d1	48.4	8.1	24.2		37.2	
Progression Factor	1.53	0.03	0.92		1.00	
Incremental Delay, d2	3.3	0.2	1.5		2.9	
Delay (s)	77.2	0.4	23.7		40.2	
Level of Service	E	A	C		D	
Approach Delay (s)		10.2	23.7		40.2	
Approach LOS		B	C		D	

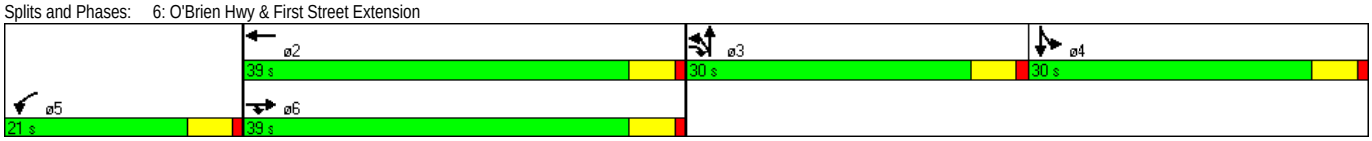
Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

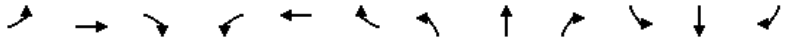
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	980	120	340	850	35	220	70	0	90	45	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)						10	515			1170		515
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1089	133	378	983	0	244	78	0	0	183	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		30.0	30.0		30.0	30.0	
Total Split (s)	0.0	39.0	69.0	21.0	39.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	0.0%	32.5%	57.5%	17.5%	32.5%	0.0%	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		None	None		Max	Max	
v/c Ratio		0.75	0.17	0.84	0.99		0.79	0.23			0.25	
Control Delay		19.9	6.9	68.1	67.8		78.0	58.2			38.6	
Queue Delay		0.0	0.1	0.0	0.0		323.6	4.1			0.0	
Total Delay		19.9	7.0	68.1	67.8		401.6	62.3			38.6	
Queue Length 50th (ft)		230	36	130	351		178	57			53	
Queue Length 95th (ft)		234	58	#197	#481		m219	m77			85	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1444	832	454	997		358	390			738	
Starvation Cap Reductn		0	0	0	0		215	247			0	
Spillback Cap Reductn		0	226	0	0		0	0			0	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		0.75	0.22	0.83	0.99		1.71	0.55			0.25	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 28 (23%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 6: O'Brien Hwy & First Street Extension





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	980	120	340	850	35	220	70	0	90	45	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91	1.00	0.97	0.95		1.00	1.00			0.95	
Frpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00			0.93	
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00	1.00			1.00	
Frt		1.00	0.85	1.00	0.99		1.00	1.00			0.97	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)		4916	1531	3204	3394		1652	1801			3003	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.97	
Satd. Flow (perm)		4916	1531	3204	3394		1652	1801			3003	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1089	133	378	944	39	244	78	0	100	50	33
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1089	133	378	983	0	244	78	0	0	183	0
Confl. Peds. (#/hr)						10	515			1170		515
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		34.2	60.7	15.8	34.2		21.5	21.5			28.5	
Effective Green, g (s)		35.2	61.7	16.8	35.2		22.5	22.5			29.5	
Actuated g/C Ratio		0.29	0.51	0.14	0.29		0.19	0.19			0.25	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1442	787	449	996		310	338			738	
v/s Ratio Prot		0.22	0.09	c0.12	c0.29		c0.15	0.04			c0.06	
v/s Ratio Perm												
v/c Ratio		0.76	0.17	0.84	0.99		0.79	0.23			0.25	
Uniform Delay, d1		38.5	15.5	50.3	42.2		46.5	41.4			36.3	
Progression Factor		0.42	0.43	1.00	1.00		1.37	1.41			1.00	
Incremental Delay, d2		3.6	0.1	13.4	25.5		9.9	0.3			0.8	
Delay (s)		19.8	6.8	63.7	67.7		73.7	58.7			37.1	
Level of Service		B	A	E	E		E	E			D	
Approach Delay (s)		18.4			66.6			70.1			37.1	
Approach LOS		B			E			E			D	

Intersection Summary			
HCM Average Control Delay	46.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø4	ø8
Lane Configurations														
Volume (vph)	110	200	45	0	0	0	90	180	505	0	170	335		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	11	11	10	12	12	12		
Storage Length (ft)	170		0	0		0	0		0	0		0		
Storage Lanes	1		0	0		0	0		1	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			No		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		181			350			571			169			
Travel Time (s)		4.1			8.0			13.0			3.8			
Confl. Peds. (#/hr)			45				190		1170			190		
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.92	0.95	0.95	0.95	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	3%	6%	3%	2%	0%	2%	3%	2%	2%	2%		
Shared Lane Traffic (%)														
Lane Group Flow (vph)	116	258	0	0	0	0	0	284	532	0	549	0		
Turn Type	Split						Split		custom					
Protected Phases	6	6					3	3	3 8		4 8		4	8
Permitted Phases														
Detector Phase	6	6					3	3	3 8		4 8			
Switch Phase														
Minimum Initial (s)	4.0	4.0					4.0	4.0					4.0	4.0
Minimum Split (s)	23.0	23.0					10.0	10.0					15.0	20.0
Total Split (s)	38.0	38.0	0.0	0.0	0.0	0.0	25.0	25.0	48.0	0.0	57.0	0.0	34.0	23.0
Total Split (%)	31.7%	31.7%	0.0%	0.0%	0.0%	0.0%	20.8%	20.8%	40.0%	0.0%	47.5%	0.0%	28%	19%
Yellow Time (s)	4.0	4.0					4.0	4.0					4.0	4.0
All-Red Time (s)	1.0	1.0					1.0	1.0					1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	0.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag	Lag	Lag					Lag	Lag					Lead	Lead
Lead-Lag Optimize?							Yes	Yes						Yes
Recall Mode	None	None					None	None					C-Max	Max
v/c Ratio	0.34	0.74						0.91	0.81		0.61			
Control Delay	42.1	57.6						81.6	41.7		17.7			
Queue Delay	1.7	0.0						41.1	0.0		1.6			
Total Delay	43.8	57.6						122.7	41.7		19.4			
Queue Length 50th (ft)	68	167						192	308		61			
Queue Length 95th (ft)	109	231						#335	#546		m101			
Internal Link Dist (ft)		101			270			491			89			
Turn Bay Length (ft)	170													
Base Capacity (vph)	485	486						312	655		903			
Starvation Cap Reductn	0	0						0	0		195			
Spillback Cap Reductn	243	0						49	0		0			
Storage Cap Reductn	0	0						0	0		0			
Reduced v/c Ratio	0.48	0.53						1.08	0.81		0.78			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 3 (3%), Referenced to phase 4:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Cambridge St. & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	200	45	0	0	0	90	180	505	0	170	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	11	11	10	12	12	12
Total Lost time (s)	4.0	4.0						4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00						1.00	1.00		0.95	
Frpb, ped/bikes	1.00	0.98						1.00	1.00		0.58	
Flpb, ped/bikes	1.00	1.00						1.00	1.00		1.00	
Frt	1.00	0.97						1.00	0.85		0.90	
Flt Protected	0.95	1.00						0.98	1.00		1.00	
Satd. Flow (prot)	1711	1716						1783	1463		1844	
Flt Permitted	0.95	1.00						0.98	1.00		1.00	
Satd. Flow (perm)	1711	1716						1783	1463		1844	
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.92	0.95	0.95	0.95	0.92	0.92	0.92
Adj. Flow (vph)	116	211	47	0	0	0	95	189	532	0	185	364
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	116	258	0	0	0	0	0	284	532	0	549	0
Confl. Peds. (#/hr)			45				190		1170			190
Heavy Vehicles (%)	2%	2%	3%	6%	3%	2%	0%	2%	3%	2%	2%	2%
Turn Type	Split						Split		custom			
Protected Phases	6	6					3	3	3 8		4 8	
Permitted Phases												
Actuated Green, G (s)	23.3	23.3						20.0	52.7		56.7	
Effective Green, g (s)	24.3	24.3						21.0	53.7		58.7	
Actuated g/C Ratio	0.20	0.20						0.18	0.45		0.49	
Clearance Time (s)	5.0	5.0						5.0				
Vehicle Extension (s)	3.0	3.0						3.0				
Lane Grp Cap (vph)	346	347						312	655		902	
v/s Ratio Prot	0.07	c0.15						c0.16	c0.36		c0.30	
v/s Ratio Perm												
v/c Ratio	0.34	0.74						0.91	0.81		0.61	
Uniform Delay, d1	40.9	44.9						48.6	28.8		22.3	
Progression Factor	1.00	1.00						1.00	1.00		1.19	
Incremental Delay, d2	0.6	8.4						29.1	7.6		2.4	
Delay (s)	41.5	53.3						77.7	36.4		29.0	
Level of Service	D	D						E	D		C	
Approach Delay (s)		49.6			0.0			50.7			29.0	
Approach LOS		D			A			D			C	

Intersection Summary			
HCM Average Control Delay	43.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

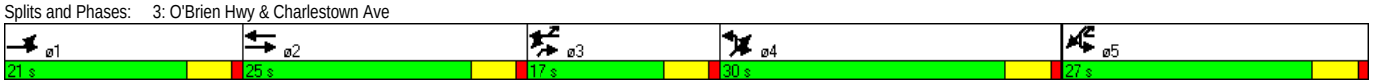
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR	ø2
Lane Configurations													
Volume (vph)	495	985	295	340	680	380	385	1225	555	295	520	195	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	11	11	10	11	10	10	11	11	10	11	11	
Storage Length (ft)	350		200	0		0	0		0	120		0	
Storage Lanes	1		1	1		1	1		1	1		0	
Taper Length (ft)	25		25	25		25	25		25	25		25	
Right Turn on Red			No			No			No			No	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		415			243			462			1068		
Travel Time (s)		9.4			5.5			10.5			24.3		
Confl. Peds. (#/hr)	50		75	75		50	50		15	15		50	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.94	0.94	0.94	
Heavy Vehicles (%)	1%	1%	2%	1%	2%	3%	1%	1%	2%	3%	1%	0%	
Shared Lane Traffic (%)										10%			
Lane Group Flow (vph)	550	1094	328	378	756	422	433	1376	624	283	791	0	
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split			
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5		2
Permitted Phases			Free										
Detector Phase	1	1 2		3	2 3	3 5	4	4	3 4	5	5		
Switch Phase													
Minimum Initial (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	21.0			10.0			10.0	10.0		27.0	27.0		18.0
Total Split (s)	21.0	46.0	0.0	17.0	42.0	44.0	30.0	30.0	47.0	27.0	27.0	0.0	25.0
Total Split (%)	17.5%	38.3%	0.0%	14.2%	35.0%	36.7%	25.0%	25.0%	39.2%	22.5%	22.5%	0.0%	21%
Yellow Time (s)	4.0			4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0			1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead			Lead			Lag	Lag					Lag
Lead-Lag Optimize?	Yes			Yes			Yes	Yes					Yes
Recall Mode	None			C-Max			None	None		None	None		None
v/c Ratio	2.33	0.63	0.22	2.09	0.70	0.96	1.20	1.84	1.14	0.99	1.33		
Control Delay	636.0	34.5	0.3	533.2	37.9	60.6	154.5	410.7	118.3	100.5	198.2		
Queue Delay	0.0	0.0	0.0	0.0	139.3	3.3	0.0	0.0	0.0	0.0	0.0		
Total Delay	636.0	34.5	0.3	533.2	177.2	63.9	154.5	410.7	118.3	100.5	198.2		
Queue Length 50th (ft)	~613	226	0	~421	280	123	~358	~747	~496	213	~384		
Queue Length 95th (ft)	#804	270	0	#597	334	#375	#527	#856	#683	#389	#501		
Internal Link Dist (ft)		335			163			382			988		
Turn Bay Length (ft)	350		200							120			
Base Capacity (vph)	236	1737	1478	181	1083	439	361	749	549	285	595		
Starvation Cap Reductn	0	0	0	0	503	8	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	2.33	0.63	0.22	2.09	1.30	0.98	1.20	1.84	1.14	0.99	1.33		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 67 (56%), Referenced to phase 3:WBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: O'Brien Hwy & Charlestown Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	495	985	295	340	680	380	385	1225	555	295	520	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	10	10	11	11	10	11	11
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1668	4964	1478	1668	3421	1463	1668	3455	1531	1488	3103	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1668	4964	1478	1668	3421	1463	1668	3455	1531	1488	3103	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.94	0.94	0.94
Adj. Flow (vph)	550	1094	328	378	756	422	433	1376	624	314	553	207
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	550	1094	328	378	756	422	433	1376	624	283	791	0
Confl. Peds. (#/hr)	50		75	75		50	50		15	15		50
Heavy Vehicles (%)	1%	1%	2%	1%	2%	3%	1%	1%	2%	3%	1%	0%
Turn Type	Prot		Free	Prot		custom	Split		pt+ov	Split		
Protected Phases	1	1 2		3	2 3	3 5	4	4	3 4	5	5	
Permitted Phases			Free									
Actuated Green, G (s)	16.0	41.0	120.0	12.0	37.0	34.0	25.0	25.0	42.0	22.0	22.0	
Effective Green, g (s)	17.0	42.0	120.0	13.0	38.0	36.0	26.0	26.0	43.0	23.0	23.0	
Actuated g/C Ratio	0.14	0.35	1.00	0.11	0.32	0.30	0.22	0.22	0.36	0.19	0.19	
Clearance Time (s)	5.0			5.0			5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0			3.0			3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	236	1737	1478	181	1083	439	361	749	549	285	595	
v/s Ratio Prot	c0.33	0.22		c0.23	c0.22	0.29	0.26	c0.40	0.41	0.19	c0.25	
v/s Ratio Perm			0.22									
v/c Ratio	2.33	0.63	0.22	2.09	0.70	0.96	1.20	1.84	1.14	0.99	1.33	
Uniform Delay, d1	51.5	32.5	0.0	53.5	36.0	41.3	47.0	47.0	38.5	48.4	48.5	
Progression Factor	1.00	1.00	1.00	1.00	0.95	0.98	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	611.8	0.7	0.3	506.0	1.7	30.4	113.5	381.9	81.9	51.1	159.6	
Delay (s)	663.3	33.2	0.3	559.5	36.0	70.8	160.5	428.9	120.4	99.6	208.1	
Level of Service	F	C	A	F	D	E	F	F	F	F	F	
Approach Delay (s)		203.5			172.6			302.0			179.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	227.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	113.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Supplemental Traffic Analysis

O'Brien Highway Cross-Section Analysis

To support the development of the Final Environmental Impact Report (FEIR) for the Green Line Extension Project, comments received from the public and from local officials were reviewed and, to the extent possible, were incorporated into the revised Lechmere Station conceptual level design. Many comments received suggested the possibility of reducing the number of proposed travel lanes along O'Brien Highway in the vicinity of Lechmere Station. To support this request, an analysis of the feasibility and practicality of reducing the O'Brien Highway roadway cross-section was conducted.. This analysis was not required by the Secretary's Certificate on the Draft Environmental Impact Report (DEIR).

The currently proposed plan for O'Brien Highway consists of two travel lanes northbound (outbound from Boston) and three travel lanes southbound (inbound to Boston). Additional turning lanes are provided at signalized intersections, as needed. At the intersection of O'Brien Highway and new North First Street, the proposed cross-section includes two travel lanes in the northbound direction and three through lanes and a right-turn lane in the southbound direction. The request from commenters was to evaluate the possibility of reducing the overall width of O'Brien Highway (in order to retain the existing Lechmere Station structure) by providing only two (and possibly a third lane for right-turns only) travel lanes southbound. Two specific options were evaluated:

- **Option 1**: Two travel lanes along O'Brien Highway southbound from just north of Third through East Street, maintaining only two shared lanes at the intersection of O'Brien Highway and North First Street; and
- **Option 2**: Two travel lanes along O'Brien Highway southbound from just north of Third through East Street, providing two through lanes and an exclusive right-turn lane at the intersection of O'Brien Highway and North First Street.

The analysis considered both 2030 future traffic volumes (without traffic related to the NorthPoint development) and existing (2007) traffic volumes on the reconstructed O'Brien Highway roadway infrastructure. This second condition was considered to address comments related to the validity of the 2030 traffic projections. The analysis also considers the width of the proposed median island and the proposed inclusion of bicycle lanes on O'Brien Highway, as well as potential impacts to these features. The critical peak hour, with respect to traffic, pedestrian, and

bicycle operations, is the morning peak hour. Therefore, only the morning peak hour is discussed as part of this analysis. Evening peak hour operations were analyzed to confirm that the morning would be the critical condition. All data are provided as an attachment to this memorandum.

The findings of the analysis are that neither Option 1 nor Option 2 are acceptable solutions for traffic, pedestrian, and bicycle operations along O'Brien Highway. Three through lanes are needed in the southbound direction to accommodate vehicular demands and to appropriately store queued vehicles at the traffic signals. An exclusive right-turn lane onto First Street is also needed to manage vehicle queues. Further, a generous sized center median along O'Brien Highway is critical to pedestrian mobility and operations at the intersection of O'Brien Highway and North First Street, as well as its ability to act as a barrier to the southbound left-turn lane movement. The center median allows for additional pedestrian crossing opportunities that could not otherwise be completed and reduces the overall time a pedestrian must wait to cross O'Brien Highway.

■

Option 1

This Option would reduce the travel lanes along O'Brien Highway in the southbound direction from three lanes to two lanes. At North First Street, an exclusive through lane and shared through/right-turn lane would be provided in the southbound direction. Table 1 presents the level of service results of this option as compared to the currently proposed cross-section.

Table 1 Option 1 Level of Service Results

Intersection	Lane Group	2030 Proposed Condition V/C[1]	Delay[2]	LOS[3]	Q[4]	2030 Future Volumes Option 1 V/C	Delay	LOS	Q	Existing Volumes Option 1 V/C	Delay	LOS	Q
O'Brien Highway	Overall Intersection	0.89	78	E		0.89	63	E		0.65	21	C	
at Third Street	O'Brien South LT-TH	1.15	97	F	#988	1.15	96	F	#1106	0.82	22	C	582
	O'Brien South -RT	NA	NA	NA	NA	0.72	21	C	462	0.71	21	C	449
	O'Brien North TH-RT	0.33	5	A	71	0.31	5	A	72	0.18	7	A	91
	Third St LT	0.38	45	D	127	0.38	45	D	130	0.36	45	D	122
	Third St LT-TH-RT	0.39	46	D	125	0.36	45	D	124	0.34	44	D	120
	Driveway LT-TH-RT	0.08	60	E	11	0.08	60	E	11	0.08	60	E	11
O'Brien Highway	Overall Intersection	0.73	20	B		0.93	25	C		0.61	6	A	
at Water Street	O'Brien South LT	0.82	40	D	332	0.83	40	D	328	0.16	35	C	33
	O'Brien South TH	0.67	13	B	153	0.99	22	C	#684	0.69	5	A	160
	O'Brien North TH-RT	0.29	17	B	151	0.28	17	B	152	0.18	4	A	103
	Water St RT	0.48	31	C	185	0.49	31	C	189	0.17	45	D	50
	Overall Intersection	0.90	40	D		1.14	>120	F		0.73	95	F	
	O'Brien South TH	0.95	28	C	#538	>1.2	>120	F	#990	>1.2	>120	F	#845
	O'Brien South RT	0.21	9	A	96	NA	NA	NA	NA	NA	NA	NA	NA
	O'Brien North LT	0.77	51	D	210	0.77	51	D	210	0.78	51	D	216
	O'Brien North TH-RT	0.51	32	C	234	0.51	32	C	233	0.35	29	C	160
	First St LT	0.12	21	C	26	0.12	20	C	28	0.19	23	C	47
	First St TH	0.87	47	D	#270	0.87	50	D	#292	0.01	19	B	8
	North First Street LT-TH-RT	0.99	90	F	#265	0.97	86	F	#263	0.16	46	D	43

Source: Vanasse Hangen Brustlin, Inc. using Synchro 7 (Build 763) software

Note: Shaded cells denote Level-of-Service E/F conditions

NA Lane Group not provided under this condition

Volume exceeds capacity, queue may be longer

1 V/C – Volume-to-capacity ratio

2 Delay – Control delay per vehicle, expressed in seconds

3 LOS – Level-of-Service

4 Q – 95th percentile queue expressed in feet

In the projected future condition, many of the traffic movements along O'Brien Highway at Third Street and North First Street operate near or above capacity. With only two lanes provided in the southbound direction (Option 1), there is a substantive decrease in overall level of service (LOS D to LOS F) at the intersection of O'Brien Highway and North First Street. Notably, the southbound through movement degrades significantly, from an average 28 seconds of delay to over 120 seconds of delay. More importantly, queues in the southbound direction are significantly higher and under Option 1 and would extend back beyond the closest upstream traffic signal. Once queues back through adjacent intersections, there is an increased likelihood that vehicles will block the intersection during a red traffic signal phase, causing "gridlock" and making it difficult for side street traffic to enter the intersection on a green signal indication. Additionally, the idling vehicles in the queue add to localized "hot spot" air quality emissions, which can contribute to unhealthy air quality, particularly during the summer months.

The analysis also considers existing traffic volumes, which are generally the volumes expected along O'Brien Highway immediately after construction is complete. This condition was analyzed because several members of the public expressed concern that there was too much uncertainty in the 2030 traffic projections and the use of existing volumes would show the benefit of a reduced cross-section. While level of service would be slightly improved, queuing in the southbound direction along O'Brien Highway would still be substantial at both Third Street and North First Street and level of service at North First Street would be poor. Therefore, all of the above stated operational concerns related to reducing the O'Brien Highway cross-section are not related solely to traffic projections and do not rely on development that some may consider speculative. Should only two southbound travel lanes be constructed, no additional growth (regional or local) could be accommodated on O'Brien Highway in the future.

Long vehicle queues present a challenge for pedestrians trying to cross O'Brien Highway. If queued vehicles are backed over crosswalks, pedestrians must then weave their way through vehicles. In this condition pedestrians are harder for a driver to see. This may also encourage pedestrians to cross against the traffic signal because they perceive traffic to be at a standstill.

The genesis of the public comments received is the desire of some members of the community to retain the existing Lechmere bus terminal structure. Under Option 1, even though only two approach lanes would be provided in the southbound direction at North First Street, there still would not be sufficient room to provide a sidewalk and bicycle lane adjacent to the bus terminal building. This option would also require a reduction in the median width to accommodate bicycles and pedestrians. The proposed center median is designed to accommodate half crossings (crossing only to the median), as well as full crossings (the entire roadway) of O'Brien Highway. This allows pedestrians to take advantage of every possible interval for crossing O'Brien Highway, while protecting pedestrians from higher volume and higher speed left-turn movements. However, this is dependent upon the provision of a center median island of sufficient width to accommodate those pedestrians who do not make it across in a single movement. Reduction in the median width would limit the number of opportunities a pedestrian has to cross O'Brien Highway, which degrades the pedestrian level of service at the intersection. Pedestrian level of service is a measure of how long a pedestrian must wait to cross the street, not how long it takes a pedestrian to walk across. Therefore reducing the median width, while shortening the crossing distance, does not improve pedestrian level of service. Even under a design that only provides for full crossings, a median for pedestrian refuge is recommended given the high vehicle volume and occasionally high travel speeds experienced along O'Brien Highway. Some portion of the population will choose to initiate a crossing of O'Brien Highway beyond the time at which a full crossing can be made and prefer to wait in the median refuge area than on the sidewalk.

■

Option 2

Option 2 provides two exclusive through lanes and an exclusive right-turn lane southbound on O'Brien Highway at North First Street. All other geometric features are identical to Option 1. Table 2 presents the level of service results of this option as compared to the currently proposed cross-section.

Table 2 Option 2 Level of Service Results

		2030 Proposed Condition				2030 Future Volumes Option 2				Existing Volumes Option 2			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]	V/C	Delay	LOS	Q	V/C	Delay	LOS	Q
O'Brien Highway	Overall Intersection	0.89	78	E		0.89	63	E		0.65	21	C	
at Third Street	O'Brien South LT-TH	1.15	97	F	#988	1.15	96	F	#1106	0.82	22	C	582
	O'Brien South -RT	NA	NA	NA	NA	0.72	21	C	462	0.71	21	C	449
	O'Brien North TH-RT	0.33	5	A	71	0.31	5	A	72	0.18	7	A	91
	Third St LT	0.38	45	D	127	0.38	45	D	130	0.36	45	D	122
	Third St LT-TH-RT	0.39	46	D	125	0.36	45	D	124	0.34	44	D	120
	Driveway LT-TH-RT	0.08	60	E	11	0.08	60	E	11	0.08	60	E	11
O'Brien Highway	Overall Intersection	0.73	20	B		0.93	25	C		0.61	6	A	
at Water Street	O'Brien South LT	0.82	40	D	332	0.83	40	D	328	0.16	35	C	33
	O'Brien South TH	0.67	13	B	153	0.99	22	C	#684	0.69	5	A	160
	O'Brien North TH-RT	0.29	17	B	151	0.28	17	B	152	0.18	4	A	103
	Water St RT	0.48	31	C	185	0.49	31	C	189	0.17	45	D	50
	Overall Intersection	0.90	40	D		1.07	109	F		0.73	95	F	
	O'Brien South TH	0.95	28	C	#538	>1.2	>120	F	#849	>1.2	>120	F	#845
	O'Brien South RT	0.21	9	A	96	0.21	7	A	50	0.19	11	B	99
	O'Brien North LT	0.77	51	D	210	0.77	51	D	210	0.78	51	D	216
	O'Brien North TH-RT	0.51	32	C	234	0.51	32	C	233	0.35	29	C	160
	First St LT	0.12	21	C	26	0.12	20	C	28	0.19	23	C	47
	First St TH	0.87	47	D	#270	0.87	50	D	#292	0.01	19	B	8
	North First Street LT-TH-RT	0.99	90	F	#265	0.97	86	F	#263	0.16	46	D	43

Source: Vanasse Hangen Brustlin, Inc. using Synchro 7 (Build 763) software

Note: Shaded cells denote Level-of-Service E/F conditions

NA Lane Group not provided under this condition

Volume exceeds capacity, queue may be longer

1 V/C – Volume-to-capacity ratio

2 Delay – Control delay per vehicle, expressed in seconds

3 LOS – Level-of-Service

4 Q – 95th percentile queue expressed in feet

The findings of the Option 2 analysis are very similar to Option 1. This is expected since the options themselves are not very different. The southbound O'Brien Highway approach at North First Street operates better under Option 2 and queuing is slightly reduced (by about 140 feet or 6 vehicles per lane) when compared to Option 1. However, queues are still significant in the southbound direction and would still extend through adjacent upstream intersections. As discussed above, long

vehicle queues present hazards to pedestrians and interfere with pedestrian, bicycle, and vehicular traffic operations.

Should Option 2 be progressed in order to retain the existing Lechmere bus terminal structure, almost the entire proposed median would have to be removed to accommodate the turn-lane, sidewalk, and bicycle lane. Shifting the alignment of the roadway to the east is not possible due to existing land uses on the opposite side of the roadway. Elimination of the median island would dramatically change levels of service and operations at the intersection of O'Brien Highway and North First Street for both vehicles and pedestrians. It also raises safety concerns for pedestrians who begin crossing too late to complete the crossing before the signal changes. The level of service analysis results presented in Table 2 do not consider the impacts of eliminating the median. Longer queues and worse levels of service would be realized on all approaches to the intersection.

Table 1
Signalized Intersection Capacity Analysis Summary
Weekday Morning

		2010 Option 1			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.65	21	C	
	EB LT-TH	0.82	22	C	582
	EB RT	0.71	21	C	449
	WB TH-RT	0.18	7	A	91
	NB LT	0.36	45	D	122
	NB LT-TH-RT	0.34	44	D	120
	SB LT-TH-RT	0.08	60	E	11
O'Brien Highway at Water Street		0.61	6	A	
	EB LT	0.16	35	C	m33
	EB TH	0.69	5	A	160
	WB TH-RT	0.18	4	A	103
	SB RT	0.17	45	D	50
O'Brien Highway at North First Street		0.82	>120	F	
	EB TH-RT	>1.20	>120	F	#975
	WB LT	0.78	51	D	216
	WB TH-RT	0.35	29	C	160
	NB LT	0.19	23	C	47
	NB TH	0.01	19	B	m8
	SB LT-TH-RT	0.16	46	D	43

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1365	148	456	387	0	47	3	0	29	24	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		0	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1681	0	507	430	0	52	3	0	0	72	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6		5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		24.0	24.0		21.0	21.0	
Total Split (s)	0.0	43.0	0.0	32.0	43.0	0.0	24.0	24.0	0.0	21.0	21.0	0.0
Total Split (%)	0.0%	35.8%	0.0%	26.7%	35.8%	0.0%	20.0%	20.0%	0.0%	17.5%	17.5%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		Max	Max		Max	Max	
v/c Ratio		1.41		0.78	0.35		0.19	0.01			0.16	
Control Delay		211.8		53.6	30.3		23.3	19.0			46.2	
Queue Delay		0.0		0.0	0.0		2.5	0.0			0.0	
Total Delay		211.8		53.6	30.3		25.8	19.0			46.2	
Queue Length 50th (ft)		~828		168	114		37	2			23	
Queue Length 95th (ft)		#975		216	160		47	m8			43	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)				250								
Base Capacity (vph)		1194		748	1212		275	300			461	
Starvation Cap Reductn		0		0	0		149	0			0	
Spillback Cap Reductn		0		0	0		0	0			0	
Storage Cap Reductn		0		0	0		0	0			0	
Reduced v/c Ratio		1.41		0.68	0.35		0.41	0.01			0.16	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 31 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1365	148	456	387	0	47	3	0	29	24	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95		0.97	0.95		1.00	1.00			0.95	
Frt		0.99		1.00	1.00		1.00	1.00			0.97	
Flt Protected		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3371		3204	3421		1652	1801			3256	
Flt Permitted		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		3371		3204	3421		1652	1801			3256	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1517	164	507	430	0	52	3	0	32	27	13
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1681	0	507	430	0	52	3	0	0	72	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		41.5		23.5	41.5		19.0	19.0			16.0	
Effective Green, g (s)		42.5		24.5	42.5		20.0	20.0			17.0	
Actuated g/C Ratio		0.35		0.20	0.35		0.17	0.17			0.14	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1194		654	1212		275	300			461	
v/s Ratio Prot		c0.50		c0.16	0.13		c0.03	0.00			c0.02	
v/s Ratio Perm												
v/c Ratio		1.41		0.78	0.35		0.19	0.01			0.16	
Uniform Delay, d1		38.8		45.1	28.6		43.0	41.7			45.2	
Progression Factor		0.61		1.00	1.00		0.50	0.45			1.00	
Incremental Delay, d2		187.5		5.7	0.8		1.5	0.1			0.7	
Delay (s)		210.9		50.9	29.4		23.0	18.8			45.9	
Level of Service		F		D	C		C	B			D	
Approach Delay (s)		210.9			41.0			22.8			45.9	
Approach LOS		F			D			C			D	

Intersection Summary			
HCM Average Control Delay	144.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	0	1669	645	64	383	0	184	0	15	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Grade (%)		0%			0%			0%			0%			
Storage Length (ft)	0		140	0		0	0		0	0		0		
Storage Lanes	0		1	0		0	1		0	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92		
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0		
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%			0%			
Shared Lane Traffic (%)							45%							
Lane Group Flow (vph)	0	1721	665	0	486	0	112	109	0	0	0	0		
Turn Type	Perm		Perm	Perm			Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6		6	2 9						4				
Detector Phase	6	6	6	2 9	2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0	4.0				4.0	4.0		3.0	3.0		4.0	4.0
Minimum Split (s)	23.0	23.0	23.0				28.0	28.0		8.0	8.0		21.0	9.0
Total Split (s)	75.0	75.0	75.0	84.0	84.0	0.0	28.0	28.0	0.0	8.0	8.0	0.0	75.0	9.0
Total Split (%)	62.5%	62.5%	62.5%	70.0%	70.0%	0.0%	23.3%	23.3%	0.0%	6.7%	6.7%	0.0%	63%	8%
Yellow Time (s)	4.0	4.0	4.0				4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0				1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max	C-Max				Max	Max		None	None		C-Max	None
v/c Ratio		0.76	0.66		0.33		0.36	0.34						
Control Delay		17.0	16.4		7.9		45.2	44.7						
Queue Delay		0.0	0.0		0.3		0.0	0.0						
Total Delay		17.0	16.4		8.2		45.2	44.7						
Queue Length 50th (ft)		390	251		53		69	67						
Queue Length 95th (ft)		473	365		104		122	120						
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)			140											
Base Capacity (vph)		2252	1008		1455		314	321						
Starvation Cap Reductn		0	0		429		0	0						
Spillback Cap Reductn		0	0		0		0	0						
Storage Cap Reductn		0	0		0		0	0						
Reduced v/c Ratio		0.76	0.66		0.47		0.36	0.34						

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 36: O'Brien Hwy & Third St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1669	645	64	383	0	184	0	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0				
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95				
Frt		1.00	0.85		1.00		1.00	0.98				
Flt Protected		1.00	1.00		0.99		0.95	0.96				
Satd. Flow (prot)		3421	1531		3397		1569	1603				
Flt Permitted		1.00	1.00		0.58		0.95	0.96				
Satd. Flow (perm)		3421	1531		1984		1569	1603				
Peak-hour factor, PHF	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	1721	665	70	416	0	204	0	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1721	665	0	486	0	112	109	0	0	0	0
Turn Type	Perm		Perm	Perm			Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6	2 9						4		
Actuated Green, G (s)		78.0	78.0		87.0		23.0	23.0				
Effective Green, g (s)		79.0	79.0		88.0		24.0	24.0				
Actuated g/C Ratio		0.66	0.66		0.73		0.20	0.20				
Clearance Time (s)		5.0	5.0				5.0	5.0				
Vehicle Extension (s)		3.0	3.0				3.0	3.0				
Lane Grp Cap (vph)		2252	1008		1455		314	321				
v/s Ratio Prot		c0.50					c0.07	0.07				
v/s Ratio Perm			0.43		c0.25							
v/c Ratio		0.76	0.66		0.33		0.36	0.34				
Uniform Delay, d1		14.1	12.4		5.7		41.3	41.2				
Progression Factor		1.00	1.00		1.27		1.00	1.00				
Incremental Delay, d2		2.5	3.4		0.1		3.1	2.9				
Delay (s)		16.6	15.8		7.3		44.5	44.1				
Level of Service		B	B		A		D	D				
Approach Delay (s)		16.4			7.3			44.3			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

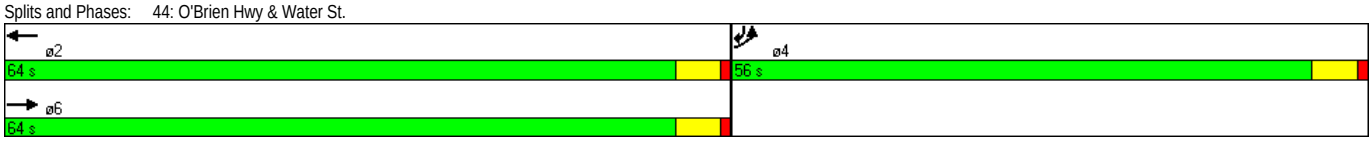
c Critical Lane Group

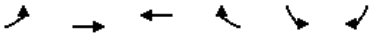
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	39	1685	413	20	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		0%	0%		0%	
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.91	0.91	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	1793	476	0	0	41
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	28.0	17.0			31.0
Total Split (s)	56.0	64.0	64.0	0.0	0.0	56.0
Total Split (%)	46.7%	53.3%	53.3%	0.0%	0.0%	46.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.15	0.68	0.18			0.16
Control Delay	31.3	6.3	5.8			40.7
Queue Delay	0.0	0.1	0.0			0.0
Total Delay	31.3	6.4	5.8			40.7
Queue Length 50th (ft)	24	137	52			22
Queue Length 95th (ft)	m33	160	103			50
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	720	2652	2634			682
Starvation Cap Reductn	0	131	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.06	0.71	0.18			0.06

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





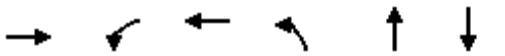
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	39	1685	413	20	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	0.99			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3300			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3300			1573
Peak-hour factor, PHF	0.94	0.94	0.91	0.91	0.90	0.90
Adj. Flow (vph)	41	1793	454	22	0	41
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	41	1793	476	0	0	41
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	17.0	93.0	93.0			17.0
Effective Green, g (s)	18.0	94.0	94.0			18.0
Actuated g/C Ratio	0.15	0.78	0.78			0.15
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	249	2603	2585			236
v/s Ratio Prot	0.02	c0.54	0.14			c0.03
v/s Ratio Perm						
v/c Ratio	0.16	0.69	0.18			0.17
Uniform Delay, d1	44.4	6.1	3.3			44.5
Progression Factor	0.78	0.64	1.27			1.00
Incremental Delay, d2	0.2	1.0	0.2			0.4
Delay (s)	34.8	4.9	4.3			44.9
Level of Service	C	A	A			D
Approach Delay (s)		5.6	4.3		44.9	
Approach LOS		A	A		D	

Intersection Summary			
HCM Average Control Delay	6.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Table 2
Signalized Intersection Capacity Analysis Summary
Weekday Evening

		2010 Option 1			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.68	32	C	
	EB LT-TH	0.57	25	C	285
	EB RT	0.43	23	C	204
	WB TH-RT	0.64	36	D	422
	NB LT	0.72	38	D	388
	NB LT-TH-RT	0.70	37	D	380
O'Brien Highway at Water Street		0.37	4	A	
	EB LT	0.11	66	E	m33
	EB TH	0.34	1	A	5
	WB TH-RT	0.42	5	A	160
	SB RT	0.09	44	D	30
O'Brien Highway at North First Street		0.61	46	D	
	EB TH-RT	0.92	34	C	#450
	WB LT	0.70	55	D	140
	WB TH-RT	0.87	50	D	#411
	NB LT	0.71	75	E	m196
	NB TH	0.01	64	E	m7
	SB LT-TH-RT	0.15	35	C	58

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

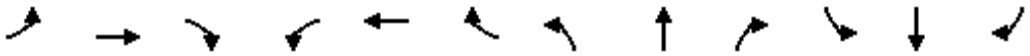


Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations						
Volume (vph)	752	265	807	186	4	15
Lane Group Flow (vph)	937	294	897	207	4	118
Turn Type		Prot		Split		
Protected Phases	6	5	2	3	3	4
Permitted Phases						
Detector Phase	6	5	2	3	3	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	23.0	21.0	23.0	30.0	30.0	30.0
Total Split (s)	39.0	21.0	39.0	30.0	30.0	30.0
Total Split (%)	32.5%	17.5%	32.5%	25.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag				Lead	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes
Recall Mode	C-Max	None	C-Max	None	None	Max
v/c Ratio	0.92	0.70	0.87	0.71	0.01	0.15
Control Delay	36.0	58.9	50.4	79.1	59.2	36.7
Queue Delay	0.0	0.0	0.0	234.1	0.0	0.0
Total Delay	36.0	58.9	50.4	313.2	59.2	36.7
Queue Length 50th (ft)	330	98	308	152	3	33
Queue Length 95th (ft)	#450	140	#411	m196	m7	58
Internal Link Dist (ft)	332		254		89	277
Turn Bay Length (ft)		250				
Base Capacity (vph)	1015	454	1031	358	390	810
Starvation Cap Reductn	0	0	0	220	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.65	0.87	1.50	0.01	0.15

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	752	91	265	807	0	186	4	0	54	15	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95		0.97	0.95		1.00	1.00			0.95	
Frt		0.98		1.00	1.00		1.00	1.00			0.95	
Flt Protected		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3366		3204	3421		1652	1801			3163	
Flt Permitted		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		3366		3204	3421		1652	1801			3163	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	836	101	294	897	0	207	4	0	60	17	41
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	937	0	294	897	0	207	4	0	0	118	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		35.2		14.8	35.2		20.3	20.3			29.7	
Effective Green, g (s)		36.2		15.8	36.2		21.3	21.3			30.7	
Actuated g/C Ratio		0.30		0.13	0.30		0.18	0.18			0.26	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1015		422	1032		293	320			809	
v/s Ratio Prot		c0.28		c0.09	0.26		c0.13	0.00			c0.04	
v/s Ratio Perm												
v/c Ratio		0.92		0.70	0.87		0.71	0.01			0.15	
Uniform Delay, d1		40.6		49.8	39.7		46.4	40.7			34.5	
Progression Factor		0.49		1.00	1.00		1.49	1.57			1.00	
Incremental Delay, d2		14.5		5.0	9.9		6.1	0.0			0.4	
Delay (s)		34.2		54.8	49.6		75.1	63.8			34.9	
Level of Service		C		D	D		E	E			C	
Approach Delay (s)		34.2			50.9			74.9			34.9	
Approach LOS		C			D			E			C	

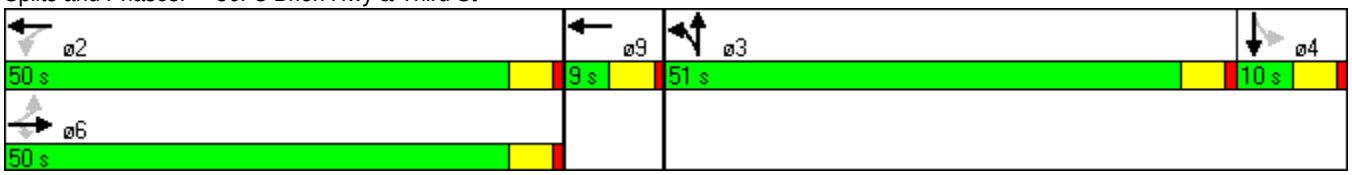
Intersection Summary			
HCM Average Control Delay	45.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

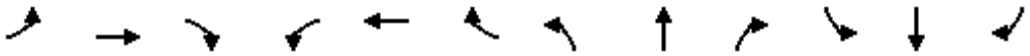
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	ø4	ø9
Lane Configurations								
Volume (vph)	813	277	18	977	785	0		
Lane Group Flow (vph)	903	308	0	1106	445	444		
Turn Type		Perm	custom		Split			
Protected Phases	6			2 9	3	3	4	9
Permitted Phases		6	2					
Detector Phase	6	6	2	2 9	3	3		
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	22.0	22.0	22.0		22.0	22.0	10.0	9.0
Total Split (s)	50.0	50.0	50.0	59.0	51.0	51.0	10.0	9.0
Total Split (%)	41.7%	41.7%	41.7%	49.2%	42.5%	42.5%	8%	8%
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag					Lead	Lead	Lag	
Lead-Lag Optimize?							Yes	
Recall Mode	C-Max	C-Max	C-Max		Max	Max	None	None
v/c Ratio	0.57	0.43		0.64	0.72	0.70		
Control Delay	24.9	23.8		37.6	39.1	37.7		
Queue Delay	0.0	0.0		0.1	0.0	0.0		
Total Delay	24.9	23.8		37.7	39.1	37.7		
Queue Length 50th (ft)	228	137		358	267	264		
Queue Length 95th (ft)	285	204		422	388	380		
Internal Link Dist (ft)	319			258		1351		
Turn Bay Length (ft)		140						
Base Capacity (vph)	1596	714		1716	615	635		
Starvation Cap Reductn	0	0		43	0	0		
Spillback Cap Reductn	0	0		0	0	0		
Storage Cap Reductn	0	0		0	0	0		
Reduced v/c Ratio	0.57	0.43		0.66	0.72	0.70		

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 36: O'Brien Hwy & Third St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	813	277	18	977	0	785	0	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0				
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95				
Frt		1.00	0.85		1.00		1.00	0.99				
Flt Protected		1.00	1.00		1.00		0.95	0.95				
Satd. Flow (prot)		3421	1531		3418		1569	1623				
Flt Permitted		1.00	1.00		0.93		0.95	0.95				
Satd. Flow (perm)		3421	1531		3169		1569	1623				
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	903	308	20	1086	0	872	0	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	903	308	0	1106	0	445	444	0	0	0	0
Turn Type	Perm		Perm	custom			Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6	2						4		
Actuated Green, G (s)		55.0	55.0		64.0		46.0	46.0				
Effective Green, g (s)		56.0	56.0		65.0		47.0	47.0				
Actuated g/C Ratio		0.47	0.47		0.54		0.39	0.39				
Clearance Time (s)		5.0	5.0				5.0	5.0				
Vehicle Extension (s)		3.0	3.0				3.0	3.0				
Lane Grp Cap (vph)		1596	714		1717		615	636				
v/s Ratio Prot		0.26					c0.28	0.27				
v/s Ratio Perm			0.20		c0.35							
v/c Ratio		0.57	0.43		0.64		0.72	0.70				
Uniform Delay, d1		23.2	21.4		19.4		31.0	30.6				
Progression Factor		1.00	1.00		1.82		1.00	1.00				
Incremental Delay, d2		1.5	1.9		0.8		7.2	6.3				
Delay (s)		24.6	23.3		36.0		38.2	36.8				
Level of Service		C	C		D		D	D				
Approach Delay (s)		24.3			36.0			37.5			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM Average Control Delay	32.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

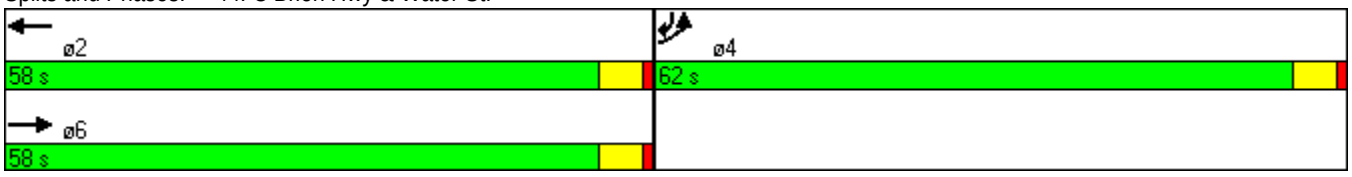
c Critical Lane Group

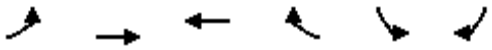
Lane Group	EBL	EBT	WBT	SBR
Lane Configurations				
Volume (vph)	24	829	1007	18
Lane Group Flow (vph)	26	891	1083	20
Turn Type	Prot			Over
Protected Phases	4	6	2	4
Permitted Phases				
Detector Phase	4	6	2	4
Switch Phase				
Minimum Initial (s)	4.0	4.0	4.0	4.0
Minimum Split (s)	31.0	31.0	21.0	31.0
Total Split (s)	62.0	58.0	58.0	62.0
Total Split (%)	51.7%	48.3%	48.3%	51.7%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Max	C-Max	None
v/c Ratio	0.10	0.34	0.41	0.08
Control Delay	57.5	0.5	6.6	38.6
Queue Delay	0.0	0.1	0.2	0.1
Total Delay	57.5	0.6	6.7	38.7
Queue Length 50th (ft)	19	4	101	11
Queue Length 95th (ft)	m33	5	160	30
Internal Link Dist (ft)		258	71	
Turn Bay Length (ft)	200			
Base Capacity (vph)	803	2657	2653	760
Starvation Cap Reductn	0	453	306	0
Spillback Cap Reductn	0	0	600	291
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.40	0.53	0.04

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	24	829	1007	11	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	1.00			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3318			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3318			1573
Peak-hour factor, PHF	0.93	0.93	0.94	0.94	0.90	0.90
Adj. Flow (vph)	26	891	1071	12	0	20
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	26	891	1083	0	0	20
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	16.8	93.2	93.2			16.8
Effective Green, g (s)	17.8	94.2	94.2			17.8
Actuated g/C Ratio	0.15	0.79	0.79			0.15
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	247	2609	2605			233
v/s Ratio Prot	c0.02	0.27	c0.33			0.01
v/s Ratio Perm						
v/c Ratio	0.11	0.34	0.42			0.09
Uniform Delay, d1	44.2	3.8	4.1			44.1
Progression Factor	1.48	0.04	1.14			1.00
Incremental Delay, d2	0.2	0.3	0.3			0.2
Delay (s)	65.6	0.5	5.0			44.2
Level of Service	E	A	A			D
Approach Delay (s)		2.3	5.0		44.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM Average Control Delay	4.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Table 1
Signalized Intersection Capacity Analysis Summary
Weekday Morning

		2030 Option 1			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.89	63	E	
	EB LT-TH	1.15	96	F	#1106
	EB RT	0.72	21	C	462
	WB TH-RT	0.31	5	A	72
	NB LT	0.38	45	D	130
	NB LT-TH-RT	0.36	45	D	124
	SB LT-TH-RT	0.08	60	E	11
O'Brien Highway at Water Street		0.93	25	C	
	EB LT	0.83	40	D	m328
	EB TH	0.99	22	C	m#684
	WB TH-RT	0.28	17	B	m152
	SB RT	0.49	31	C	189
O'Brien Highway at North First Street		1.14	>120	F	
	EB TH-RT	>1.20	>120	F	m#990
	WB LT	0.77	51	D	210
	WB TH-RT	0.51	32	C	233
	NB LT	0.12	20	C	m28
	NB TH	0.87	50	D	#292
	SB LT-TH-RT	0.97	86	F	#263

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1505	160	445	475	75	30	235	0	115	285	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		0	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1850	0	494	611	0	33	261	0	0	462	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6		5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		24.0	24.0		21.0	21.0	
Total Split (s)	0.0	43.0	0.0	32.0	43.0	0.0	24.0	24.0	0.0	21.0	21.0	0.0
Total Split (%)	0.0%	35.8%	0.0%	26.7%	35.8%	0.0%	20.0%	20.0%	0.0%	17.5%	17.5%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		Max	Max		Max	Max	
v/c Ratio		1.54		0.77	0.51		0.12	0.87			0.97	
Control Delay		263.1		53.5	32.8		20.4	51.8			86.5	
Queue Delay		0.0		0.0	0.0		0.0	132.1			34.3	
Total Delay		263.1		53.5	32.8		20.4	183.9			120.9	
Queue Length 50th (ft)		~939		164	172		12	187			166	
Queue Length 95th (ft)		m#990		210	233		m28	#292			#263	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)				250								
Base Capacity (vph)		1205		748	1198		275	300			475	
Starvation Cap Reductn		0		0	0		0	98			0	
Spillback Cap Reductn		0		0	0		0	0			50	
Storage Cap Reductn		0		0	0		0	0			0	
Reduced v/c Ratio		1.54		0.66	0.51		0.12	1.29			1.09	

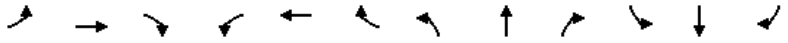
Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 31 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1505	160	445	475	75	30	235	0	115	285	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95		0.97	0.95		1.00	1.00			0.95	
Frt		0.99		1.00	0.98		1.00	1.00			0.99	
Flt Protected		1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)		3372		3204	3352		1652	1801			3356	
Flt Permitted		1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (perm)		3372		3204	3352		1652	1801			3356	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1672	178	494	528	83	33	261	0	128	317	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1850	0	494	611	0	33	261	0	0	462	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		41.9		23.1	41.9		19.0	19.0			16.0	
Effective Green, g (s)		42.9		24.1	42.9		20.0	20.0			17.0	
Actuated g/C Ratio		0.36		0.20	0.36		0.17	0.17			0.14	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1205		643	1198		275	300			475	
v/s Ratio Prot		c0.55		c0.15	0.18		0.02	c0.14			c0.14	
v/s Ratio Perm												
v/c Ratio		1.54		0.77	0.51		0.12	0.87			0.97	
Uniform Delay, d1		38.5		45.3	30.3		42.5	48.7			51.3	
Progression Factor		0.42		1.00	1.00		0.45	0.50			1.00	
Incremental Delay, d2		242.4		5.5	1.6		0.8	25.2			35.0	
Delay (s)		258.6		50.8	31.8		20.1	49.7			86.3	
Level of Service		F		D	C		C	D			F	
Approach Delay (s)		258.6			40.3			46.3			86.3	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM Average Control Delay	155.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

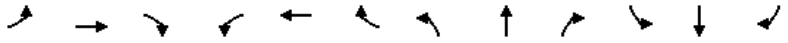
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	5	2215	655	0	650	15	175	1	35	1	1	1		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Grade (%)		0%			0%			0%			0%			
Storage Length (ft)	0		140	0		0	0		0	0		0		
Storage Lanes	0		1	0		0	1		0	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92		
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0		
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%			0%			
Shared Lane Traffic (%)							38%							
Lane Group Flow (vph)	0	2289	675	0	723	0	120	114	0	0	3	0		
Turn Type	Perm		Perm				Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6		6							4				
Detector Phase	6	6	6		2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0	4.0				4.0	4.0		3.0	3.0		4.0	4.0
Minimum Split (s)	23.0	23.0	23.0				28.0	28.0		8.0	8.0		21.0	9.0
Total Split (s)	75.0	75.0	75.0	0.0	84.0	0.0	28.0	28.0	0.0	8.0	8.0	0.0	75.0	9.0
Total Split (%)	62.5%	62.5%	62.5%	0.0%	70.0%	0.0%	23.3%	23.3%	0.0%	6.7%	6.7%	0.0%	63%	8%
Yellow Time (s)	4.0	4.0	4.0				4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0				1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max	C-Max				Max	Max		None	None		C-Max	None
v/c Ratio		1.09	0.68		0.29		0.38	0.36			0.05			
Control Delay		70.5	18.7		4.6		45.8	45.3			51.3			
Queue Delay		105.1	0.0		0.3		0.0	2.0			0.0			
Total Delay		175.5	18.7		4.9		45.8	47.3			51.3			
Queue Length 50th (ft)		~906	258		41		74	71			1			
Queue Length 95th (ft)		#1106	462		72		130	124			11			
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)			140											
Base Capacity (vph)		2105	988		2456		314	315			60			
Starvation Cap Reductn		0	0		1001		0	0			0			
Spillback Cap Reductn		377	0		0		0	105			0			
Storage Cap Reductn		0	0		0		0	0			0			
Reduced v/c Ratio		1.32	0.68		0.50		0.38	0.54			0.05			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 36: O'Brien Hwy & Third St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	2215	655	0	650	15	175	1	35	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95			1.00	
Frt		1.00	0.85		1.00		1.00	0.95			0.95	
Flt Protected		1.00	1.00		1.00		0.95	0.97			0.98	
Satd. Flow (prot)		3421	1531		3410		1569	1572			1750	
Flt Permitted		0.95	1.00		1.00		0.95	0.97			1.00	
Satd. Flow (perm)		3263	1531		3410		1569	1572			1779	
Peak-hour factor, PHF	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	5	2284	675	0	707	16	194	1	39	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	2289	675	0	723	0	120	114	0	0	2	0
Turn Type	Perm		Perm				Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6							4		
Actuated Green, G (s)		72.4	72.4		81.4		23.0	23.0			0.6	
Effective Green, g (s)		73.4	73.4		82.4		24.0	24.0			1.6	
Actuated g/C Ratio		0.61	0.61		0.69		0.20	0.20			0.01	
Clearance Time (s)		5.0	5.0				5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)		1996	936		2342		314	314			24	
v/s Ratio Prot					c0.21		c0.08	0.07				
v/s Ratio Perm		c0.70	0.44								c0.00	
v/c Ratio		1.15	0.72		0.31		0.38	0.36			0.08	
Uniform Delay, d1		23.3	16.2		7.5		41.6	41.4			58.5	
Progression Factor		1.00	1.00		0.69		1.00	1.00			1.00	
Incremental Delay, d2		72.5	4.8		0.1		3.5	3.2			1.5	
Delay (s)		95.8	21.0		5.2		45.1	44.6			60.0	
Level of Service		F	C		A		D	D			E	
Approach Delay (s)		78.7			5.2			44.9			60.0	
Approach LOS		E			A			D			E	

Intersection Summary			
HCM Average Control Delay	63.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

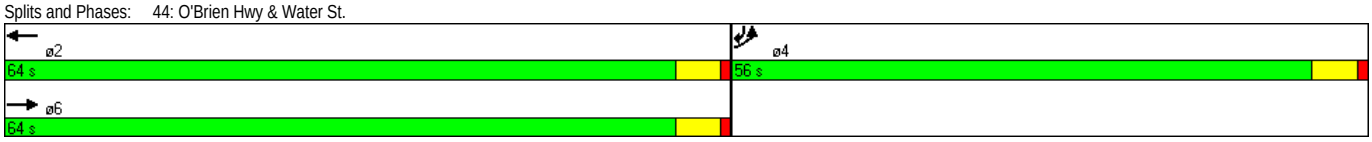
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	460	1790	420	65	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		0%	0%		0%	
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.91	0.91	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	489	1904	533	0	0	272
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	28.0	17.0			31.0
Total Split (s)	56.0	64.0	64.0	0.0	0.0	56.0
Total Split (%)	46.7%	53.3%	53.3%	0.0%	0.0%	46.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.83	0.99	0.28			0.49
Control Delay	39.3	24.7	18.8			32.0
Queue Delay	79.4	51.2	0.0			0.0
Total Delay	118.7	75.8	18.8			32.0
Queue Length 50th (ft)	352	~402	64			142
Queue Length 95th (ft)	m328	m#684	m152			189
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	720	1918	1880			682
Starvation Cap Reductn	299	232	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	1.16	1.13	0.28			0.40

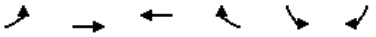
Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	460	1790	420	65	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	0.98			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3257			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3257			1573
Peak-hour factor, PHF	0.94	0.94	0.91	0.91	0.90	0.90
Adj. Flow (vph)	489	1904	462	71	0	272
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	489	1904	533	0	0	272
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	41.7	68.3	68.3			41.7
Effective Green, g (s)	42.7	69.3	69.3			42.7
Actuated g/C Ratio	0.36	0.58	0.58			0.36
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	591	1919	1881			560
v/s Ratio Prot	c0.29	c0.57	0.16			0.17
v/s Ratio Perm						
v/c Ratio	0.83	0.99	0.28			0.49
Uniform Delay, d1	35.3	25.1	12.8			30.1
Progression Factor	1.10	0.70	1.31			1.00
Incremental Delay, d2	0.9	4.6	0.3			0.7
Delay (s)	39.8	22.1	17.1			30.8
Level of Service	D	C	B			C
Approach Delay (s)		25.7	17.1		30.8	
Approach LOS		C	B		C	

Intersection Summary			
HCM Average Control Delay	24.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Table 2
Signalized Intersection Capacity Analysis Summary
Weekday Evening

		2030 Option 1			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.93	63	E	
	EB LT-TH	1.10	92	F	#734
	EB RT	0.65	33	C	348
	WB TH-RT	0.97	57	E	#711
	NB LT	0.82	45	D	#490
	NB LT-TH-RT	0.79	42	D	448
	SB LT-TH-RT	0.07	59	E	11
O'Brien Highway at Water Street		0.64	18	B	
	EB LT	0.69	62	E	m239
	EB TH	0.50	1	A	m8
	WB TH-RT	0.58	14	B	m160
	SB RT	0.76	46	D	274
O'Brien Highway at North First Street		0.94	85	F	
	EB TH-RT	>1.20	120	F	#622
	WB LT	0.86	66	E	#207
	WB TH-RT	1.05	86	F	#528
	NB LT	0.74	62	E	m185
	NB TH	0.77	63	E	m210
	SB LT-TH-RT	0.79	50	D	#321

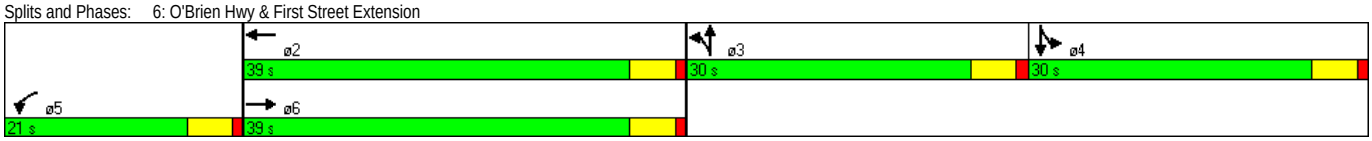
Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	950	120	350	885	55	205	235	0	180	375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		0	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1189	0	389	1044	0	228	261	0	0	650	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6		5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		30.0	30.0		30.0	30.0	
Total Split (s)	0.0	39.0	0.0	21.0	39.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	0.0%	32.5%	0.0%	17.5%	32.5%	0.0%	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		None	None		Max	Max	
v/c Ratio		1.21		0.86	1.05		0.74	0.77			0.79	
Control Delay		123.0		70.0	84.6		64.1	65.2			51.3	
Queue Delay		18.6		4.2	0.0		300.5	394.3			220.6	
Total Delay		141.5		74.2	84.6		364.5	459.5			271.9	
Queue Length 50th (ft)		~508		135	~410		167	191			223	
Queue Length 95th (ft)		#622		#207	#528		m185	m210			#321	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)				250								
Base Capacity (vph)		984		454	992		358	390			821	
Starvation Cap Reductn		0		0	0		220	250			0	
Spillback Cap Reductn		33		29	0		0	0			384	
Storage Cap Reductn		0		0	0		0	0			0	
Reduced v/c Ratio		1.25		0.92	1.05		1.65	1.86			1.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	950	120	350	885	55	205	235	0	180	375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95		0.97	0.95		1.00	1.00			0.95	
Frt		0.98		1.00	0.99		1.00	1.00			0.99	
Flt Protected		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3364		3204	3391		1652	1801			3344	
Flt Permitted		1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		3364		3204	3391		1652	1801			3344	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1056	133	389	983	61	228	261	0	200	417	33
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1189	0	389	1044	0	228	261	0	0	650	0
Turn Type				Prot			Split			Split		
Protected Phases		6		5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		34.1		15.9	34.1		21.5	21.5			28.5	
Effective Green, g (s)		35.1		16.9	35.1		22.5	22.5			29.5	
Actuated g/C Ratio		0.29		0.14	0.29		0.19	0.19			0.25	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		984		451	992		310	338			822	
v/s Ratio Prot		c0.35		c0.12	0.31		0.14	c0.14			c0.19	
v/s Ratio Perm												
v/c Ratio		1.21		0.86	1.05		0.74	0.77			0.79	
Uniform Delay, d1		42.5		50.4	42.5		45.9	46.3			42.4	
Progression Factor		0.40		1.00	1.00		1.25	1.25			1.00	
Incremental Delay, d2		102.6		15.5	43.4		4.3	5.1			7.7	
Delay (s)		119.8		65.9	85.8		61.6	62.8			50.0	
Level of Service		F		E	F		E	E			D	
Approach Delay (s)		119.8			80.4			62.3			50.0	
Approach LOS		F			F			E			D	

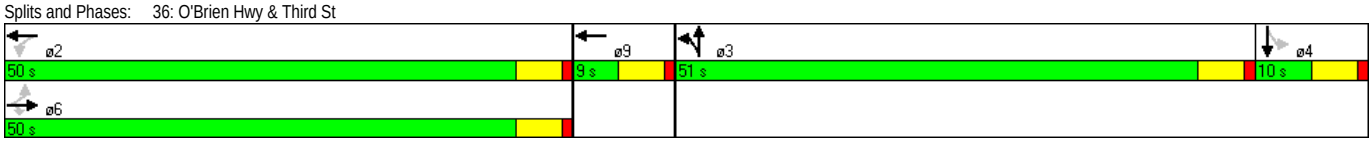
Intersection Summary			
HCM Average Control Delay	85.3	HCM Level of Service	F
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø9
Lane Configurations													
Volume (vph)	1	1270	375	1	1395	1	875	1	30	1	1	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12	
Storage Length (ft)	0		140	0		0	0		0	0		0	
Storage Lanes	0		1	0		0	1		0	0		0	
Taper Length (ft)	25		25	25		25	25		25	25		25	
Right Turn on Red			No			No			No			Yes	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		399			338			1431			198		
Travel Time (s)		9.1			7.7			32.5			4.5		
Peak Hour Factor	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92	
Shared Lane Traffic (%)							48%						
Lane Group Flow (vph)	0	1412	417	0	1552	0	505	501	0	0	3	0	
Turn Type	Perm		Perm	custom			Split			Perm			
Protected Phases		6			2 9		3	3			4		9
Permitted Phases	6		6	2						4			
Detector Phase	6	6	6	2	2 9		3	3		4	4		
Switch Phase													
Minimum Initial (s)	4.0	4.0	4.0	4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	22.0	22.0	22.0	22.0			22.0	22.0		10.0	10.0		9.0
Total Split (s)	50.0	50.0	50.0	50.0	59.0	0.0	51.0	51.0	0.0	10.0	10.0	0.0	9.0
Total Split (%)	41.7%	41.7%	41.7%	41.7%	49.2%	0.0%	42.5%	42.5%	0.0%	8.3%	8.3%	0.0%	8%
Yellow Time (s)	4.0	4.0	4.0	4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lead		Lag	Lag		
Lead-Lag Optimize?										Yes	Yes		
Recall Mode	C-Max	C-Max	C-Max	C-Max			Max	Max		None	None		None
v/c Ratio		1.02	0.61		0.91		0.82	0.79			0.03		
Control Delay		61.6	30.5		45.5		45.5	42.9			49.0		
Queue Delay		13.8	0.0		1.1		0.0	10.0			0.0		
Total Delay		75.4	30.5		46.6		45.5	52.9			49.0		
Queue Length 50th (ft)		485	203		531		321	312			1		
Queue Length 95th (ft)		#734	348		#711		#490	448			11		
Internal Link Dist (ft)		319			258			1351			118		
Turn Bay Length (ft)			140										
Base Capacity (vph)		1389	689		1714		615	633			90		
Starvation Cap Reductn		0	0		50		0	0			0		
Spillback Cap Reductn		52	0		0		0	108			0		
Storage Cap Reductn		0	0		0		0	0			0		
Reduced v/c Ratio		1.06	0.61		0.93		0.82	0.95			0.03		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 36: O'Brien Hwy & Third St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1270	375	1	1395	1	875	1	30	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95			1.00	
Frt		1.00	0.85		1.00		1.00	0.99			0.95	
Flt Protected		1.00	1.00		1.00		0.95	0.96			0.98	
Satd. Flow (prot)		3421	1531		3421		1569	1618			1750	
Flt Permitted		0.90	1.00		0.95		0.95	0.96			1.00	
Satd. Flow (perm)		3085	1531		3265		1569	1618			1779	
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92
Adj. Flow (vph)	1	1411	417	1	1550	1	972	1	33	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	1412	417	0	1552	0	505	501	0	0	2	0
Turn Type	Perm		Perm	custom			Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6	2						4		
Actuated Green, G (s)		49.0	49.0		58.0		46.0	46.0			1.0	
Effective Green, g (s)		50.0	50.0		59.0		47.0	47.0			2.0	
Actuated g/C Ratio		0.42	0.42		0.49		0.39	0.39			0.02	
Clearance Time (s)		5.0	5.0				5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)		1285	638		1605		615	634			30	
v/s Ratio Prot							c0.32	0.31				
v/s Ratio Perm		c0.46	0.27		c0.48						c0.00	
v/c Ratio		1.10	0.65		0.97		0.82	0.79			0.07	
Uniform Delay, d1		35.0	28.1		29.6		32.7	32.2			58.1	
Progression Factor		1.00	1.00		1.47		1.00	1.00			1.00	
Incremental Delay, d2		56.7	5.2		13.7		11.7	9.7			0.9	
Delay (s)		91.7	33.2		57.2		44.5	41.9			59.0	
Level of Service		F	C		E		D	D			E	
Approach Delay (s)		78.4			57.2			43.2			59.0	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM Average Control Delay	62.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

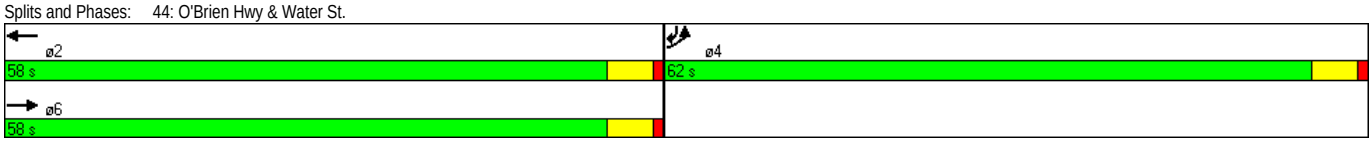
c Critical Lane Group

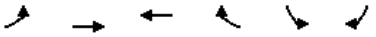
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	310	990	1080	80	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Peak Hour Factor	0.93	0.93	0.94	0.94	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	333	1065	1234	0	0	350
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	31.0	21.0			31.0
Total Split (s)	62.0	58.0	58.0	0.0	0.0	62.0
Total Split (%)	51.7%	48.3%	48.3%	0.0%	0.0%	51.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.69	0.50	0.58			0.76
Control Delay	60.2	0.6	15.9			48.9
Queue Delay	0.7	1.0	0.4			674.4
Total Delay	60.9	1.6	16.3			723.3
Queue Length 50th (ft)	242	8	162			217
Queue Length 95th (ft)	m239	m8	m160			274
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	803	2131	2110			760
Starvation Cap Reductn	208	733	57			0
Spillback Cap Reductn	0	0	354			640
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.56	0.76	0.70			2.92

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	310	990	1080	80	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	0.99			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3289			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3289			1573
Peak-hour factor, PHF	0.93	0.93	0.94	0.94	0.90	0.90
Adj. Flow (vph)	333	1065	1149	85	0	350
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	333	1065	1234	0	0	350
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	34.0	76.0	76.0			34.0
Effective Green, g (s)	35.0	77.0	77.0			35.0
Actuated g/C Ratio	0.29	0.64	0.64			0.29
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	485	2132	2110			459
v/s Ratio Prot	0.20	0.32	c0.38			c0.22
v/s Ratio Perm						
v/c Ratio	0.69	0.50	0.58			0.76
Uniform Delay, d1	37.6	11.3	12.3			38.7
Progression Factor	1.63	0.04	1.12			1.00
Incremental Delay, d2	0.4	0.1	0.3			7.4
Delay (s)	61.8	0.6	14.1			46.1
Level of Service	E	A	B			D
Approach Delay (s)		15.2	14.1		46.1	
Approach LOS		B	B		D	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Table 1
Signalized Intersection Capacity Analysis Summary
Weekday Morning

		2010 Option 2			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.65	21	C	
	EB LT-TH	0.82	22	C	582
	EB RT	0.71	21	C	449
	WB TH-RT	0.18	7	A	91
	NB LT	0.36	45	D	122
	NB LT-TH-RT	0.34	44	D	120
	SB LT-TH-RT	0.08	60	E	11
O'Brien Highway at Water Street		0.61	7	A	
	EB LT	0.16	32	C	m27
	EB TH	0.69	6	A	243
	WB TH-RT	0.18	4	A	103
	SB RT	0.17	45	D	50
O'Brien Highway at North First Street		0.73	95	F	
	EB TH	>1.20	>120	F	#844
	EB RT	0.19	11	B	m99
	WB LT	0.78	51	D	216
	WB TH-RT	0.35	29	C	160
	NB LT	0.19	23	C	47
	NB TH	0.01	19	B	m8
	SB LT-TH-RT	0.16	46	D	43

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1365	148	456	387	0	47	3	0	29	24	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1517	164	507	430	0	52	3	0	0	72	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		24.0	24.0		21.0	21.0	
Total Split (s)	0.0	43.0	67.0	32.0	43.0	0.0	24.0	24.0	0.0	21.0	21.0	0.0
Total Split (%)	0.0%	35.8%	55.8%	26.7%	35.8%	0.0%	20.0%	20.0%	0.0%	17.5%	17.5%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		Max	Max		Max	Max	
v/c Ratio		1.25	0.19	0.78	0.35		0.19	0.01			0.16	
Control Delay		143.7	11.8	53.6	30.3		23.3	19.0			46.2	
Queue Delay		0.0	0.0	0.0	0.0		2.5	0.0			0.0	
Total Delay		143.7	11.8	53.6	30.3		25.8	19.0			46.2	
Queue Length 50th (ft)		~695	54	168	114		37	2			23	
Queue Length 95th (ft)		#844	m99	216	160		47	m8			43	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1212	848	748	1212		275	300			461	
Starvation Cap Reductn		0	0	0	0		149	0			0	
Spillback Cap Reductn		0	0	0	0		0	0			0	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		1.25	0.19	0.68	0.35		0.41	0.01			0.16	

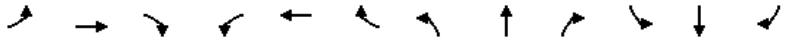
Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 31 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1365	148	456	387	0	47	3	0	29	24	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00	0.97	0.95		1.00	1.00			0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00			0.97	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3421	1531	3204	3421		1652	1801			3256	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		3421	1531	3204	3421		1652	1801			3256	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1517	164	507	430	0	52	3	0	32	27	13
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1517	164	507	430	0	52	3	0	0	72	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		41.5	65.5	23.5	41.5		19.0	19.0			16.0	
Effective Green, g (s)		42.5	66.5	24.5	42.5		20.0	20.0			17.0	
Actuated g/C Ratio		0.35	0.55	0.20	0.35		0.17	0.17			0.14	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1212	848	654	1212		275	300			461	
v/s Ratio Prot		c0.44	c0.11	c0.16	0.13		0.03	0.00			c0.02	
v/s Ratio Perm												
v/c Ratio		1.25	0.19	0.78	0.35		0.19	0.01			0.16	
Uniform Delay, d1		38.8	13.4	45.1	28.6		43.0	41.7			45.2	
Progression Factor		0.60	0.80	1.00	1.00		0.50	0.45			1.00	
Incremental Delay, d2		118.7	0.4	5.7	0.8		1.5	0.1			0.7	
Delay (s)		142.1	11.1	50.9	29.4		23.0	18.8			45.9	
Level of Service		F	B	D	C		C	B			D	
Approach Delay (s)		129.3			41.0			22.8			45.9	
Approach LOS		F			D			C			D	

Intersection Summary			
HCM Average Control Delay	94.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	0	1669	645	0	383	0	184	0	15	1	1	1		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Grade (%)		0%			0%			0%			0%			
Storage Length (ft)	0		140	0		0	0		0	0		0		
Storage Lanes	0		1	0		0	1		0	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92		
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0		
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%			0%			
Shared Lane Traffic (%)							45%							
Lane Group Flow (vph)	0	1721	665	0	416	0	112	109	0	0	3	0		
Turn Type	Perm		Perm				Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6		6							4				
Detector Phase	6	6	6		2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0	4.0				4.0	4.0		3.0	3.0		4.0	4.0
Minimum Split (s)	23.0	23.0	23.0				28.0	28.0		8.0	8.0		21.0	9.0
Total Split (s)	75.0	75.0	75.0	0.0	84.0	0.0	28.0	28.0	0.0	8.0	8.0	0.0	75.0	9.0
Total Split (%)	62.5%	62.5%	62.5%	0.0%	70.0%	0.0%	23.3%	23.3%	0.0%	6.7%	6.7%	0.0%	63%	8%
Yellow Time (s)	4.0	4.0	4.0				4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0				1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max	C-Max				Max	Max		None	None		C-Max	None
v/c Ratio		0.78	0.67		0.17		0.36	0.34			0.05			
Control Delay		19.0	18.3		5.8		45.2	44.7			51.3			
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0			
Total Delay		19.0	18.3		5.8		45.2	44.7			51.3			
Queue Length 50th (ft)		390	251		45		69	67			1			
Queue Length 95th (ft)		582	449		91		122	120			11			
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)			140											
Base Capacity (vph)		2206	988		2463		314	321			60			
Starvation Cap Reductn		0	0		0		0	0			0			
Spillback Cap Reductn		17	0		0		0	0			0			
Storage Cap Reductn		0	0		0		0	0			0			
Reduced v/c Ratio		0.79	0.67		0.17		0.36	0.34			0.05			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 36: O'Brien Hwy & Third St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1669	645	0	383	0	184	0	15	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95			1.00	
Frt		1.00	0.85		1.00		1.00	0.98			0.95	
Flt Protected		1.00	1.00		1.00		0.95	0.96			0.98	
Satd. Flow (prot)		3421	1531		3421		1569	1603			1750	
Flt Permitted		1.00	1.00		1.00		0.95	0.96			1.00	
Satd. Flow (perm)		3421	1531		3421		1569	1603			1779	
Peak-hour factor, PHF	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	1721	665	0	416	0	204	0	17	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	1721	665	0	416	0	112	109	0	0	2	0
Turn Type	Perm		Perm				Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6							4		
Actuated Green, G (s)		72.4	72.4		81.4		23.0	23.0			0.6	
Effective Green, g (s)		73.4	73.4		82.4		24.0	24.0			1.6	
Actuated g/C Ratio		0.61	0.61		0.69		0.20	0.20			0.01	
Clearance Time (s)		5.0	5.0				5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)		2093	936		2349		314	321			24	
v/s Ratio Prot		c0.50			c0.12		c0.07	0.07				
v/s Ratio Perm			0.43								c0.00	
v/c Ratio		0.82	0.71		0.18		0.36	0.34			0.08	
Uniform Delay, d1		18.2	16.0		6.7		41.3	41.2			58.5	
Progression Factor		1.00	1.00		0.99		1.00	1.00			1.00	
Incremental Delay, d2		3.8	4.6		0.0		3.1	2.9			1.5	
Delay (s)		22.0	20.6		6.7		44.5	44.1			60.0	
Level of Service		C	C		A		D	D			E	
Approach Delay (s)		21.6			6.7			44.3			60.0	
Approach LOS		C			A			D			E	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

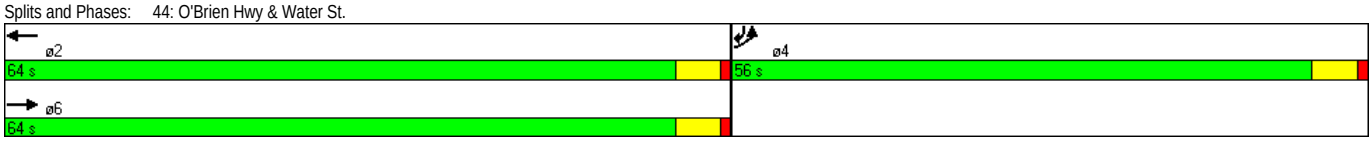
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	39	1685	413	20	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)		0%	0%		0%	
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.91	0.91	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	1793	476	0	0	41
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	28.0	17.0			31.0
Total Split (s)	56.0	64.0	64.0	0.0	0.0	56.0
Total Split (%)	46.7%	53.3%	53.3%	0.0%	0.0%	46.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.15	0.68	0.18			0.16
Control Delay	28.7	7.3	5.8			40.7
Queue Delay	0.0	0.2	0.0			0.0
Total Delay	28.7	7.5	5.8			40.7
Queue Length 50th (ft)	24	137	52			22
Queue Length 95th (ft)	m27	243	103			50
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	720	2652	2634			682
Starvation Cap Reductn	0	202	0			0
Spillback Cap Reductn	0	0	0			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.06	0.73	0.18			0.06

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	39	1685	413	20	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	0.99			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3300			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3300			1573
Peak-hour factor, PHF	0.94	0.94	0.91	0.91	0.90	0.90
Adj. Flow (vph)	41	1793	454	22	0	41
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	41	1793	476	0	0	41
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	17.0	93.0	93.0			17.0
Effective Green, g (s)	18.0	94.0	94.0			18.0
Actuated g/C Ratio	0.15	0.78	0.78			0.15
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	249	2603	2585			236
v/s Ratio Prot	0.02	c0.54	0.14			c0.03
v/s Ratio Perm						
v/c Ratio	0.16	0.69	0.18			0.17
Uniform Delay, d1	44.4	6.1	3.3			44.5
Progression Factor	0.71	0.76	1.27			1.00
Incremental Delay, d2	0.2	1.0	0.2			0.4
Delay (s)	31.8	5.6	4.3			44.9
Level of Service	C	A	A			D
Approach Delay (s)		6.2	4.3		44.9	
Approach LOS		A	A		D	

Intersection Summary			
HCM Average Control Delay	6.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Table 2
Signalized Intersection Capacity Analysis Summary
Weekday Evening

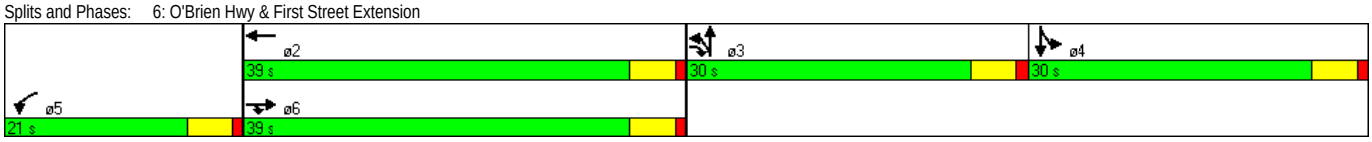
		2010 Option 2			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.68	32	C	
	EB LT-TH	0.57	25	C	285
	EB RT	0.43	23	C	204
	WB TH-RT	0.64	36	D	422
	NB LT	0.72	38	D	388
	NB LT-TH-RT	0.70	37	D	380
O'Brien Highway at Water Street		0.37	4	A	
	EB LT	0.11	66	E	m33
	EB TH	0.34	1	A	5
	WB TH-RT	0.42	5	A	160
	SB RT	0.09	44	D	30
O'Brien Highway at North First Street		0.60	42	D	
	EB TH	0.81	25	C	353
	EB RT	0.13	7	A	59
	WB LT	0.70	55	D	140
	WB TH-RT	0.87	50	D	#411
	NB LT	0.71	75	E	m196
	NB TH	0.01	64	E	m7
	SB LT-TH-RT	0.15	35	C	58

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	752	91	265	807	0	186	4	0	54	15	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	836	101	294	897	0	207	4	0	0	118	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		30.0	30.0		30.0	30.0	
Total Split (s)	0.0	39.0	69.0	21.0	39.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	0.0%	32.5%	57.5%	17.5%	32.5%	0.0%	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		None	None		Max	Max	
v/c Ratio		0.81	0.13	0.70	0.87		0.71	0.01			0.15	
Control Delay		25.6	7.5	58.9	50.4		79.1	59.2			36.7	
Queue Delay		0.0	0.0	0.0	0.0		234.1	0.0			0.0	
Total Delay		25.6	7.5	58.9	50.4		313.2	59.2			36.7	
Queue Length 50th (ft)		282	36	98	308		152	3			33	
Queue Length 95th (ft)		353	59	140	#411		m196	m7			58	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1031	844	454	1031		358	390			810	
Starvation Cap Reductn		0	0	0	0		220	0			0	
Spillback Cap Reductn		0	0	0	0		0	0			0	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		0.81	0.12	0.65	0.87		1.50	0.01			0.15	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 28 (23%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 6: O'Brien Hwy & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	752	91	265	807	0	186	4	0	54	15	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00	0.97	0.95		1.00	1.00			0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00			0.95	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3421	1531	3204	3421		1652	1801			3163	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		3421	1531	3204	3421		1652	1801			3163	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	836	101	294	897	0	207	4	0	60	17	41
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	836	101	294	897	0	207	4	0	0	118	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		35.2	60.5	14.8	35.2		20.3	20.3			29.7	
Effective Green, g (s)		36.2	61.5	15.8	36.2		21.3	21.3			30.7	
Actuated g/C Ratio		0.30	0.51	0.13	0.30		0.18	0.18			0.26	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1032	785	422	1032		293	320			809	
v/s Ratio Prot		0.24	0.07	c0.09	c0.26		c0.13	0.00			c0.04	
v/s Ratio Perm												
v/c Ratio		0.81	0.13	0.70	0.87		0.71	0.01			0.15	
Uniform Delay, d1		38.7	15.3	49.8	39.7		46.4	40.7			34.5	
Progression Factor		0.47	0.48	1.00	1.00		1.49	1.57			1.00	
Incremental Delay, d2		6.7	0.1	5.0	9.9		6.1	0.0			0.4	
Delay (s)		24.9	7.4	54.8	49.6		75.1	63.8			34.9	
Level of Service		C	A	D	D		E	E			C	
Approach Delay (s)		23.0			50.9			74.9			34.9	
Approach LOS		C			D			E			C	

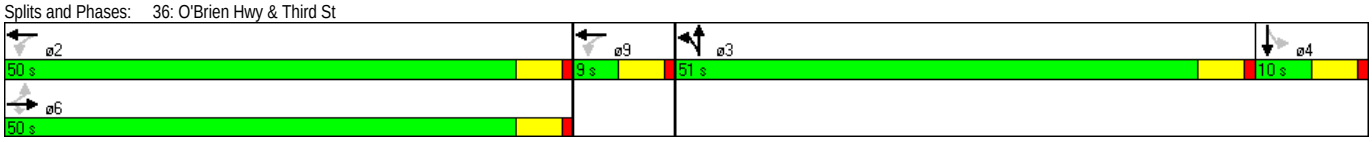
Intersection Summary			
HCM Average Control Delay	41.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

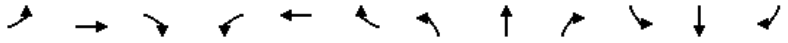
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø2	ø9
Lane Configurations														
Volume (vph)	0	813	277	18	977	0	785	0	15	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12		
Storage Length (ft)	0		140	0		0	0		0	0		0		
Storage Lanes	0		1	0		0	1		0	0		0		
Taper Length (ft)	25		25	25		25	25		25	25		25		
Right Turn on Red			No			No			No			Yes		
Link Speed (mph)		30			30			30			30			
Link Distance (ft)		399			338			1431			198			
Travel Time (s)		9.1			7.7			32.5			4.5			
Peak Hour Factor	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92		
Shared Lane Traffic (%)							49%							
Lane Group Flow (vph)	0	903	308	0	1106	0	445	444	0	0	0	0		
Turn Type	Perm		Perm	Perm			Split			Perm				
Protected Phases		6			2 9		3	3			4		2	9
Permitted Phases	6		6	2 9						4				
Detector Phase	6	6	6	2 9	2 9		3	3		4	4			
Switch Phase														
Minimum Initial (s)	4.0	4.0	4.0				4.0	4.0		4.0	4.0		4.0	4.0
Minimum Split (s)	22.0	22.0	22.0				22.0	22.0		10.0	10.0		22.0	9.0
Total Split (s)	50.0	50.0	50.0	59.0	59.0	0.0	51.0	51.0	0.0	10.0	10.0	0.0	50.0	9.0
Total Split (%)	41.7%	41.7%	41.7%	49.2%	49.2%	0.0%	42.5%	42.5%	0.0%	8.3%	8.3%	0.0%	42%	8%
Yellow Time (s)	4.0	4.0	4.0				4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)	1.0	1.0	1.0				1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag							Lead	Lead		Lag	Lag			
Lead-Lag Optimize?										Yes	Yes			
Recall Mode	C-Max	C-Max	C-Max				Max	Max		None	None		C-Max	None
v/c Ratio		0.57	0.43		0.64		0.72	0.70						
Control Delay		24.9	23.8		37.6		39.1	37.7						
Queue Delay		0.0	0.0		0.1		0.0	0.0						
Total Delay		24.9	23.8		37.7		39.1	37.7						
Queue Length 50th (ft)		228	137		358		267	264						
Queue Length 95th (ft)		285	204		422		388	380						
Internal Link Dist (ft)		319			258			1351			118			
Turn Bay Length (ft)			140											
Base Capacity (vph)		1596	714		1716		615	635						
Starvation Cap Reductn		0	0		43		0	0						
Spillback Cap Reductn		0	0		0		0	0						
Storage Cap Reductn		0	0		0		0	0						
Reduced v/c Ratio		0.57	0.43		0.66		0.72	0.70						

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 36: O'Brien Hwy & Third St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	813	277	18	977	0	785	0	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0				
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95				
Frt		1.00	0.85		1.00		1.00	0.99				
Flt Protected		1.00	1.00		1.00		0.95	0.95				
Satd. Flow (prot)		3421	1531		3418		1569	1623				
Flt Permitted		1.00	1.00		0.93		0.95	0.95				
Satd. Flow (perm)		3421	1531		3169		1569	1623				
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	903	308	20	1086	0	872	0	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	903	308	0	1106	0	445	444	0	0	0	0
Turn Type	Perm		Perm	Perm			Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6	2 9						4		
Actuated Green, G (s)		55.0	55.0		64.0		46.0	46.0				
Effective Green, g (s)		56.0	56.0		65.0		47.0	47.0				
Actuated g/C Ratio		0.47	0.47		0.54		0.39	0.39				
Clearance Time (s)		5.0	5.0				5.0	5.0				
Vehicle Extension (s)		3.0	3.0				3.0	3.0				
Lane Grp Cap (vph)		1596	714		1717		615	636				
v/s Ratio Prot		0.26					c0.28	0.27				
v/s Ratio Perm			0.20		c0.35							
v/c Ratio		0.57	0.43		0.64		0.72	0.70				
Uniform Delay, d1		23.2	21.4		19.4		31.0	30.6				
Progression Factor		1.00	1.00		1.82		1.00	1.00				
Incremental Delay, d2		1.5	1.9		0.8		7.2	6.3				
Delay (s)		24.6	23.3		36.0		38.2	36.8				
Level of Service		C	C		D		D	D				
Approach Delay (s)		24.3			36.0			37.5			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM Average Control Delay	32.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

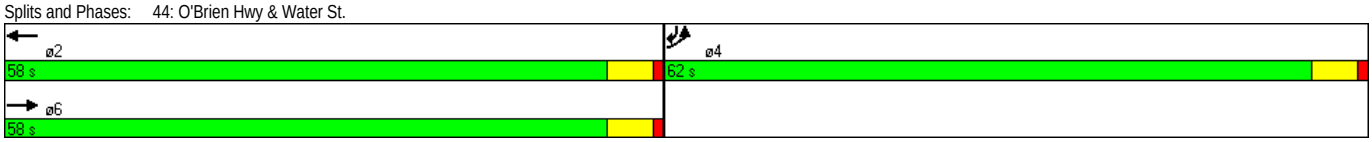
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	24	829	1007	11	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Peak Hour Factor	0.93	0.93	0.94	0.94	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	891	1083	0	0	20
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	31.0	21.0			31.0
Total Split (s)	62.0	58.0	58.0	0.0	0.0	62.0
Total Split (%)	51.7%	48.3%	48.3%	0.0%	0.0%	51.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.10	0.34	0.41			0.08
Control Delay	57.5	0.5	6.6			38.6
Queue Delay	0.0	0.1	0.2			0.1
Total Delay	57.5	0.6	6.7			38.7
Queue Length 50th (ft)	19	4	101			11
Queue Length 95th (ft)	m33	5	160			30
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	803	2657	2653			760
Starvation Cap Reductn	0	453	306			0
Spillback Cap Reductn	0	0	600			291
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.03	0.40	0.53			0.04

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	24	829	1007	11	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	1.00			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3318			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3318			1573
Peak-hour factor, PHF	0.93	0.93	0.94	0.94	0.90	0.90
Adj. Flow (vph)	26	891	1071	12	0	20
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	26	891	1083	0	0	20
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	16.8	93.2	93.2			16.8
Effective Green, g (s)	17.8	94.2	94.2			17.8
Actuated g/C Ratio	0.15	0.79	0.79			0.15
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	247	2609	2605			233
v/s Ratio Prot	c0.02	0.27	c0.33			0.01
v/s Ratio Perm						
v/c Ratio	0.11	0.34	0.42			0.09
Uniform Delay, d1	44.2	3.8	4.1			44.1
Progression Factor	1.48	0.04	1.14			1.00
Incremental Delay, d2	0.2	0.3	0.3			0.2
Delay (s)	65.6	0.5	5.0			44.2
Level of Service	E	A	A			D
Approach Delay (s)		2.3	5.0		44.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM Average Control Delay	4.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Table 5
Signalized Intersection Capacity Analysis Summary
Weekday Morning

		2030 Option 2			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.89	63	E	
	EB LT-TH	1.15	96	F	#1106
	EB RT	0.72	21	C	462
	WB TH-RT	0.31	5	A	72
	NB LT	0.38	45	D	130
	NB LT-TH-RT	0.36	45	D	124
	SB LT-TH-RT	0.08	60	E	11
O'Brien Highway at Water Street		0.93	25	C	
	EB LT	0.83	40	D	m328
	EB TH	0.99	22	C	m#684
	WB TH-RT	0.28	17	B	m152
	SB RT	0.49	31	C	189
O'Brien Highway at North First Street		1.07	109	F	
	EB TH	>1.20	>120	F	m#849
	EB RT	0.21	7	A	m50
	WB LT	0.77	51	D	210
	WB TH-RT	0.51	32	C	233
	NB LT	0.12	20	C	m28
	NB TH	0.87	50	D	#292
	SB LT-TH-RT	0.97	86	F	#263

Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Volume (vph)	1505	160	445	475	30	235	285
Lane Group Flow (vph)	1672	178	494	611	33	261	462
Turn Type		pt+ov	Prot		Split		
Protected Phases	6	6 3	5	2	3	3	4
Permitted Phases							
Detector Phase	6	6 3	5	2	3	3	4
Switch Phase							
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	23.0		21.0	23.0	24.0	24.0	21.0
Total Split (s)	43.0	67.0	32.0	43.0	24.0	24.0	21.0
Total Split (%)	35.8%	55.8%	26.7%	35.8%	20.0%	20.0%	17.5%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag					Lead	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes
Recall Mode	C-Max		None	C-Max	Max	Max	Max
v/c Ratio	1.37	0.21	0.77	0.51	0.12	0.87	0.97
Control Delay	188.2	7.6	53.5	32.8	20.4	51.8	86.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	132.1	34.3
Total Delay	188.2	7.6	53.5	32.8	20.4	183.9	120.9
Queue Length 50th (ft)	~798	52	164	172	12	187	166
Queue Length 95th (ft)	m#849	m50	210	233	m28	#292	#263
Internal Link Dist (ft)	332			254		89	277
Turn Bay Length (ft)		140	250				
Base Capacity (vph)	1222	853	748	1198	275	300	475
Starvation Cap Reductn	0	0	0	0	0	98	0
Spillback Cap Reductn	0	0	0	0	0	0	50
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.37	0.21	0.66	0.51	0.12	1.29	1.09

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 31 (26%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1505	160	445	475	75	30	235	0	115	285	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00	0.97	0.95		1.00	1.00			0.95	
Frt		1.00	0.85	1.00	0.98		1.00	1.00			0.99	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)		3421	1531	3204	3352		1652	1801			3356	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (perm)		3421	1531	3204	3352		1652	1801			3356	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1672	178	494	528	83	33	261	0	128	317	17
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1672	178	494	611	0	33	261	0	0	462	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		41.9	65.9	23.1	41.9		19.0	19.0			16.0	
Effective Green, g (s)		42.9	66.9	24.1	42.9		20.0	20.0			17.0	
Actuated g/C Ratio		0.36	0.56	0.20	0.36		0.17	0.17			0.14	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1223	854	643	1198		275	300			475	
v/s Ratio Prot		c0.49	0.12	c0.15	0.18		0.02	c0.14			c0.14	
v/s Ratio Perm												
v/c Ratio		1.37	0.21	0.77	0.51		0.12	0.87			0.97	
Uniform Delay, d1		38.5	13.3	45.3	30.3		42.5	48.7			51.3	
Progression Factor		0.42	0.52	1.00	1.00		0.45	0.50			1.00	
Incremental Delay, d2		167.2	0.2	5.5	1.6		0.8	25.2			35.0	
Delay (s)		183.4	7.1	50.8	31.8		20.1	49.7			86.3	
Level of Service		F	A	D	C		C	D			F	
Approach Delay (s)		166.4			40.3			46.3			86.3	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM Average Control Delay	109.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

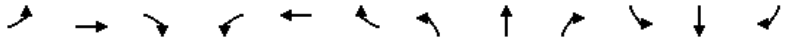
Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	ø2	ø9
Lane Configurations										
Volume (vph)	5	2215	655	650	175	1	1	1		
Lane Group Flow (vph)	0	2289	675	723	120	114	0	3		
Turn Type	Perm		Perm		Split		Perm			
Protected Phases		6		2 9	3	3		4	2	9
Permitted Phases	6		6				4			
Detector Phase	6	6	6	2 9	3	3	4	4		
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0	3.0	3.0	4.0	4.0
Minimum Split (s)	23.0	23.0	23.0		28.0	28.0	8.0	8.0	21.0	9.0
Total Split (s)	75.0	75.0	75.0	84.0	28.0	28.0	8.0	8.0	75.0	9.0
Total Split (%)	62.5%	62.5%	62.5%	70.0%	23.3%	23.3%	6.7%	6.7%	63%	8%
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0		
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lead/Lag					Lead	Lead	Lag	Lag		
Lead-Lag Optimize?							Yes	Yes		
Recall Mode	C-Max	C-Max	C-Max		Max	Max	None	None	C-Max	None
v/c Ratio		1.09	0.68	0.29	0.38	0.36		0.05		
Control Delay		70.5	18.7	4.6	45.8	45.3		51.3		
Queue Delay		105.1	0.0	0.3	0.0	2.0		0.0		
Total Delay		175.5	18.7	4.9	45.8	47.3		51.3		
Queue Length 50th (ft)		~906	258	41	74	71		1		
Queue Length 95th (ft)		#1106	462	72	130	124		11		
Internal Link Dist (ft)		319		258		1351		118		
Turn Bay Length (ft)			140							
Base Capacity (vph)		2105	988	2456	314	315		60		
Starvation Cap Reductn		0	0	1001	0	0		0		
Spillback Cap Reductn		377	0	0	0	105		0		
Storage Cap Reductn		0	0	0	0	0		0		
Reduced v/c Ratio		1.32	0.68	0.50	0.38	0.54		0.05		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 36: O'Brien Hwy & Third St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	2215	655	0	650	15	175	1	35	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95			1.00	
Frt		1.00	0.85		1.00		1.00	0.95			0.95	
Flt Protected		1.00	1.00		1.00		0.95	0.97			0.98	
Satd. Flow (prot)		3421	1531		3410		1569	1572			1750	
Flt Permitted		0.95	1.00		1.00		0.95	0.97			1.00	
Satd. Flow (perm)		3263	1531		3410		1569	1572			1779	
Peak-hour factor, PHF	0.97	0.97	0.97	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	5	2284	675	0	707	16	194	1	39	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	2289	675	0	723	0	120	114	0	0	2	0
Turn Type	Perm		Perm				Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6							4		
Actuated Green, G (s)		72.4	72.4		81.4		23.0	23.0			0.6	
Effective Green, g (s)		73.4	73.4		82.4		24.0	24.0			1.6	
Actuated g/C Ratio		0.61	0.61		0.69		0.20	0.20			0.01	
Clearance Time (s)		5.0	5.0				5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)		1996	936		2342		314	314			24	
v/s Ratio Prot					c0.21		c0.08	0.07				
v/s Ratio Perm		c0.70	0.44								c0.00	
v/c Ratio		1.15	0.72		0.31		0.38	0.36			0.08	
Uniform Delay, d1		23.3	16.2		7.5		41.6	41.4			58.5	
Progression Factor		1.00	1.00		0.69		1.00	1.00			1.00	
Incremental Delay, d2		72.5	4.8		0.1		3.5	3.2			1.5	
Delay (s)		95.8	21.0		5.2		45.1	44.6			60.0	
Level of Service		F	C		A		D	D			E	
Approach Delay (s)		78.7			5.2			44.9			60.0	
Approach LOS		E			A			D			E	

Intersection Summary			
HCM Average Control Delay	63.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

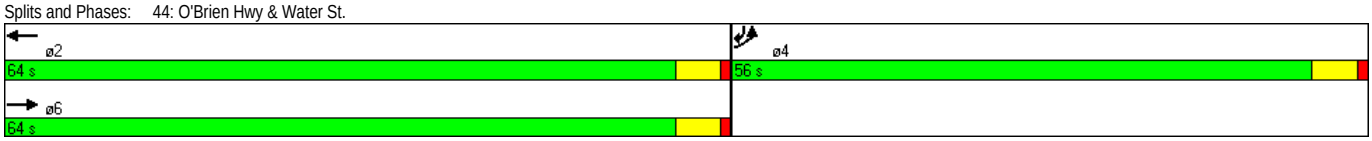
c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBR
Lane Configurations				
Volume (vph)	460	1790	420	245
Lane Group Flow (vph)	489	1904	533	272
Turn Type	Prot			Over
Protected Phases	4	6	2	4
Permitted Phases				
Detector Phase	4	6	2	4
Switch Phase				
Minimum Initial (s)	4.0	4.0	4.0	4.0
Minimum Split (s)	31.0	28.0	17.0	31.0
Total Split (s)	56.0	64.0	64.0	56.0
Total Split (%)	46.7%	53.3%	53.3%	46.7%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	C-Max	C-Max	None
v/c Ratio	0.83	0.99	0.28	0.49
Control Delay	39.3	24.7	18.8	32.0
Queue Delay	79.4	51.2	0.0	0.0
Total Delay	118.7	75.8	18.8	32.0
Queue Length 50th (ft)	352	~402	64	142
Queue Length 95th (ft)	m328	m#684	m152	189
Internal Link Dist (ft)		258	71	
Turn Bay Length (ft)	200			
Base Capacity (vph)	720	1918	1880	682
Starvation Cap Reductn	299	232	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.16	1.13	0.28	0.40

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	460	1790	420	65	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	0.98			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3257			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3257			1573
Peak-hour factor, PHF	0.94	0.94	0.91	0.91	0.90	0.90
Adj. Flow (vph)	489	1904	462	71	0	272
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	489	1904	533	0	0	272
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	41.7	68.3	68.3			41.7
Effective Green, g (s)	42.7	69.3	69.3			42.7
Actuated g/C Ratio	0.36	0.58	0.58			0.36
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	591	1919	1881			560
v/s Ratio Prot	c0.29	c0.57	0.16			0.17
v/s Ratio Perm						
v/c Ratio	0.83	0.99	0.28			0.49
Uniform Delay, d1	35.3	25.1	12.8			30.1
Progression Factor	1.10	0.70	1.31			1.00
Incremental Delay, d2	0.9	4.6	0.3			0.7
Delay (s)	39.8	22.1	17.1			30.8
Level of Service	D	C	B			C
Approach Delay (s)		25.7	17.1		30.8	
Approach LOS		C	B		C	

Intersection Summary			
HCM Average Control Delay	24.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Table 6
Signalized Intersection Capacity Analysis Summary
Weekday Evening

		2030 Option 2			
Intersection	Lane Group	V/C[1]	Delay[2]	LOS[3]	Q[4]
O'Brien Highway at Third Street		0.93	63	E	
	EB LT-TH	1.10	92	F	#734
	EB RT	0.65	33	C	348
	WB TH-RT	0.97	57	E	#711
	NB LT	0.82	45	D	#490
	NB LT-TH-RT	0.79	42	D	448
	SB LT-TH-RT	0.07	59	E	11
O'Brien Highway at Water Street		0.64	18	B	
	EB LT	0.69	62	E	m239
	EB TH	0.50	1	A	m8
	WB TH-RT	0.58	14	B	m160
	SB RT	0.76	46	D	274
O'Brien Highway at First Street Extension		0.89	64	E	
	EB TH	1.05	60	E	#515
	EB RT	0.17	5	A	22
	WB LT	0.86	66	E	#207
	WB TH-RT	1.05	86	F	#528
	NB LT	0.73	62	E	m185
	NB TH	0.77	63	E	m210
	SB LT-TH-RT	0.79	50	D	#321

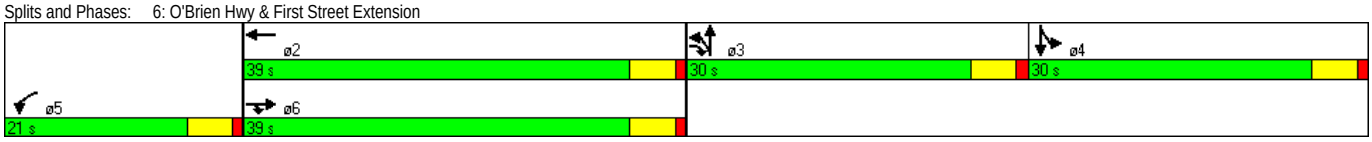
Source: VHB, Inc. using Synchro 7 (Build 773 Revision 8) software.
Note: Shaded cells denote LOS E/F conditions.
1 V/C – Volume-to-capacity ratio.
2 Delay – Control delay per vehicle, expressed in seconds.
3 LOS – Level-of-Service.
4 Q – 95th percentile queue length estimate, in feet.
NB=Northbound; SB=Southbound; EB=Eastbound; WB=Westbound; LT=left-turn; TH=through; RT=right-turn
m Volume for 95th percentile queue is metered by upstream signal
95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	950	120	350	885	55	205	235	0	180	375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	11	11	10	11	11	11	11	11
Storage Length (ft)	0		140	250		0	0		0	0		0
Storage Lanes	0		1	2		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Right Turn on Red			No			No			No			No
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		412			334			169			357	
Travel Time (s)		9.4			7.6			3.8			8.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1056	133	389	1044	0	228	261	0	0	650	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Detector Phase		6	6 3	5	2		3	3		4	4	
Switch Phase												
Minimum Initial (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)		23.0		21.0	23.0		30.0	30.0		30.0	30.0	
Total Split (s)	0.0	39.0	69.0	21.0	39.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	0.0%	32.5%	57.5%	17.5%	32.5%	0.0%	25.0%	25.0%	0.0%	25.0%	25.0%	0.0%
Yellow Time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode		C-Max		None	C-Max		None	None		Max	Max	
v/c Ratio		1.05	0.17	0.86	1.05		0.73	0.77			0.79	
Control Delay		62.3	4.9	70.0	84.6		64.0	65.1			51.4	
Queue Delay		0.0	0.1	4.2	0.0		311.4	412.7			216.1	
Total Delay		62.3	5.0	74.2	84.6		375.3	477.7			267.4	
Queue Length 50th (ft)		~403	30	135	~410		167	191			224	
Queue Length 95th (ft)		#515	22	#207	#528		m185	m210			#321	
Internal Link Dist (ft)		332			254			89			277	
Turn Bay Length (ft)			140	250								
Base Capacity (vph)		1001	831	454	992		358	390			820	
Starvation Cap Reductn		0	0	0	0		222	253			0	
Spillback Cap Reductn		0	141	29	0		0	0			380	
Storage Cap Reductn		0	0	0	0		0	0			0	
Reduced v/c Ratio		1.05	0.19	0.92	1.05		1.68	1.91			1.48	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 28 (23%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: O'Brien Hwy & First Street Extension



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	950	120	350	885	55	205	235	0	180	375	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	11	11	10	11	11	11	11	11
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00	0.97	0.95		1.00	1.00			0.95	
Frt		1.00	0.85	1.00	0.99		1.00	1.00			0.99	
Flt Protected		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)		3421	1531	3204	3391		1652	1801			3344	
Flt Permitted		1.00	1.00	0.95	1.00		0.95	1.00			0.98	
Satd. Flow (perm)		3421	1531	3204	3391		1652	1801			3344	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1056	133	389	983	61	228	261	0	200	417	33
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1056	133	389	1044	0	228	261	0	0	650	0
Turn Type			pt+ov	Prot			Split			Split		
Protected Phases		6	6 3	5	2		3	3		4	4	
Permitted Phases												
Actuated Green, G (s)		34.1	60.7	15.9	34.1		21.6	21.6			28.4	
Effective Green, g (s)		35.1	61.7	16.9	35.1		22.6	22.6			29.4	
Actuated g/C Ratio		0.29	0.51	0.14	0.29		0.19	0.19			0.24	
Clearance Time (s)		5.0		5.0	5.0		5.0	5.0			5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1001	787	451	992		311	339			819	
v/s Ratio Prot		c0.31	0.09	c0.12	0.31		0.14	c0.14			c0.19	
v/s Ratio Perm												
v/c Ratio		1.05	0.17	0.86	1.05		0.73	0.77			0.79	
Uniform Delay, d1		42.5	15.5	50.4	42.5		45.9	46.2			42.5	
Progression Factor		0.40	0.30	1.00	1.00		1.25	1.25			1.00	
Incremental Delay, d2		42.9	0.1	15.5	43.4		4.2	5.0			7.8	
Delay (s)		59.7	4.7	65.9	85.8		61.5	62.6			50.3	
Level of Service		E	A	E	F		E	E			D	
Approach Delay (s)		53.6			80.4			62.1			50.3	
Approach LOS		D			F			E			D	

Intersection Summary			
HCM Average Control Delay	64.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

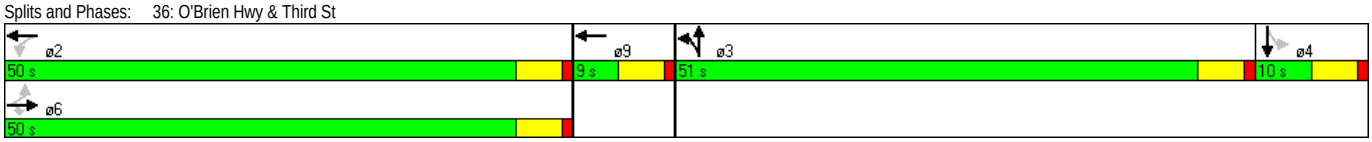
c Critical Lane Group

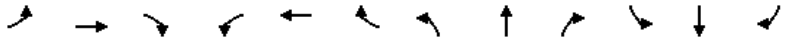
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	ø9
Lane Configurations													
Volume (vph)	1	1270	375	1	1395	1	875	1	30	1	1	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	11	11	11	11	11	10	11	10	12	12	12	
Storage Length (ft)	0		140	0		0	0		0	0		0	
Storage Lanes	0		1	0		0	1		0	0		0	
Taper Length (ft)	25		25	25		25	25		25	25		25	
Right Turn on Red			No			No			No			Yes	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		399			338			1431			198		
Travel Time (s)		9.1			7.7			32.5			4.5		
Peak Hour Factor	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92	
Shared Lane Traffic (%)							48%						
Lane Group Flow (vph)	0	1412	417	0	1552	0	505	501	0	0	3	0	
Turn Type	Perm		Perm	custom			Split			Perm			
Protected Phases		6			2 9		3	3			4		9
Permitted Phases	6		6	2						4			
Detector Phase	6	6	6	2	2 9		3	3		4	4		
Switch Phase													
Minimum Initial (s)	4.0	4.0	4.0	4.0			4.0	4.0		4.0	4.0		4.0
Minimum Split (s)	22.0	22.0	22.0	22.0			22.0	22.0		10.0	10.0		9.0
Total Split (s)	50.0	50.0	50.0	50.0	59.0	0.0	51.0	51.0	0.0	10.0	10.0	0.0	9.0
Total Split (%)	41.7%	41.7%	41.7%	41.7%	49.2%	0.0%	42.5%	42.5%	0.0%	8.3%	8.3%	0.0%	8%
Yellow Time (s)	4.0	4.0	4.0	4.0			4.0	4.0		4.0	4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0			1.0	1.0		1.0	1.0		1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	-1.0	-1.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lead		Lag	Lag		
Lead-Lag Optimize?										Yes	Yes		
Recall Mode	C-Max	C-Max	C-Max	C-Max			Max	Max		None	None		None
v/c Ratio		1.02	0.61		0.91		0.82	0.79			0.03		
Control Delay		61.6	30.5		45.5		45.5	42.9			49.0		
Queue Delay		13.8	0.0		1.1		0.0	10.0			0.0		
Total Delay		75.4	30.5		46.6		45.5	52.9			49.0		
Queue Length 50th (ft)		485	203		531		321	312			1		
Queue Length 95th (ft)		#734	348		#711		#490	448			11		
Internal Link Dist (ft)		319			258			1351			118		
Turn Bay Length (ft)			140										
Base Capacity (vph)		1389	689		1714		615	633			90		
Starvation Cap Reductn		0	0		50		0	0			0		
Spillback Cap Reductn		52	0		0		0	108			0		
Storage Cap Reductn		0	0		0		0	0			0		
Reduced v/c Ratio		1.06	0.61		0.93		0.82	0.95			0.03		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 36: O'Brien Hwy & Third St





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1270	375	1	1395	1	875	1	30	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	11	10	12	12	12
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	
Lane Util. Factor		0.95	1.00		0.95		0.95	0.95			1.00	
Frt		1.00	0.85		1.00		1.00	0.99			0.95	
Flt Protected		1.00	1.00		1.00		0.95	0.96			0.98	
Satd. Flow (prot)		3421	1531		3421		1569	1618			1750	
Flt Permitted		0.90	1.00		0.95		0.95	0.96			1.00	
Satd. Flow (perm)		3085	1531		3265		1569	1618			1779	
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90	0.92	0.92	0.92
Adj. Flow (vph)	1	1411	417	1	1550	1	972	1	33	1	1	1
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	1412	417	0	1552	0	505	501	0	0	2	0
Turn Type	Perm		Perm	custom			Split			Perm		
Protected Phases		6			2 9		3	3			4	
Permitted Phases	6		6	2						4		
Actuated Green, G (s)		49.0	49.0		58.0		46.0	46.0			1.0	
Effective Green, g (s)		50.0	50.0		59.0		47.0	47.0			2.0	
Actuated g/C Ratio		0.42	0.42		0.49		0.39	0.39			0.02	
Clearance Time (s)		5.0	5.0				5.0	5.0			5.0	
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	
Lane Grp Cap (vph)		1285	638		1605		615	634			30	
v/s Ratio Prot							c0.32	0.31				
v/s Ratio Perm		c0.46	0.27		c0.48						c0.00	
v/c Ratio		1.10	0.65		0.97		0.82	0.79			0.07	
Uniform Delay, d1		35.0	28.1		29.6		32.7	32.2			58.1	
Progression Factor		1.00	1.00		1.47		1.00	1.00			1.00	
Incremental Delay, d2		56.7	5.2		13.7		11.7	9.7			0.9	
Delay (s)		91.7	33.2		57.2		44.5	41.9			59.0	
Level of Service		F	C		E		D	D			E	
Approach Delay (s)		78.4			57.2			43.2			59.0	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM Average Control Delay	62.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

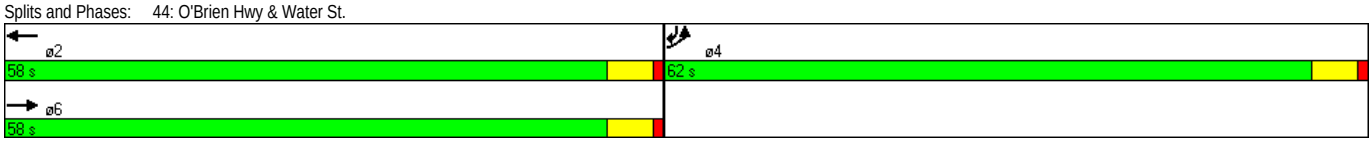
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	310	990	1080	80	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25			25	25	25
Right Turn on Red				No		No
Link Speed (mph)		30	30		30	
Link Distance (ft)		338	151		222	
Travel Time (s)		7.7	3.4		5.0	
Peak Hour Factor	0.93	0.93	0.94	0.94	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	333	1065	1234	0	0	350
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Detector Phase	4	6	2			4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0			4.0
Minimum Split (s)	31.0	31.0	21.0			31.0
Total Split (s)	62.0	58.0	58.0	0.0	0.0	62.0
Total Split (%)	51.7%	48.3%	48.3%	0.0%	0.0%	51.7%
Yellow Time (s)	4.0	4.0	4.0			4.0
All-Red Time (s)	1.0	1.0	1.0			1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	0.0	0.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max			None
v/c Ratio	0.69	0.50	0.58			0.76
Control Delay	60.2	0.6	15.9			48.9
Queue Delay	0.7	1.0	0.4			674.4
Total Delay	60.9	1.6	16.3			723.3
Queue Length 50th (ft)	242	8	162			217
Queue Length 95th (ft)	m239	m8	m160			274
Internal Link Dist (ft)		258	71		142	
Turn Bay Length (ft)	200					
Base Capacity (vph)	803	2131	2110			760
Starvation Cap Reductn	208	733	57			0
Spillback Cap Reductn	0	0	354			640
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.56	0.76	0.70			2.92

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 44: O'Brien Hwy & Water St.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	310	990	1080	80	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	0.95	0.95			1.00
Frt	1.00	1.00	0.99			0.86
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	1662	3323	3289			1573
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	1662	3323	3289			1573
Peak-hour factor, PHF	0.93	0.93	0.94	0.94	0.90	0.90
Adj. Flow (vph)	333	1065	1149	85	0	350
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	333	1065	1234	0	0	350
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Turn Type	Prot					Over
Protected Phases	4	6	2			4
Permitted Phases						
Actuated Green, G (s)	34.0	76.0	76.0			34.0
Effective Green, g (s)	35.0	77.0	77.0			35.0
Actuated g/C Ratio	0.29	0.64	0.64			0.29
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	485	2132	2110			459
v/s Ratio Prot	0.20	0.32	c0.38			c0.22
v/s Ratio Perm						
v/c Ratio	0.69	0.50	0.58			0.76
Uniform Delay, d1	37.6	11.3	12.3			38.7
Progression Factor	1.63	0.04	1.12			1.00
Incremental Delay, d2	0.4	0.1	0.3			7.4
Delay (s)	61.8	0.6	14.1			46.1
Level of Service	E	A	B			D
Approach Delay (s)		15.2	14.1		46.1	
Approach LOS		B	B		D	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

MBTA Rider Survey

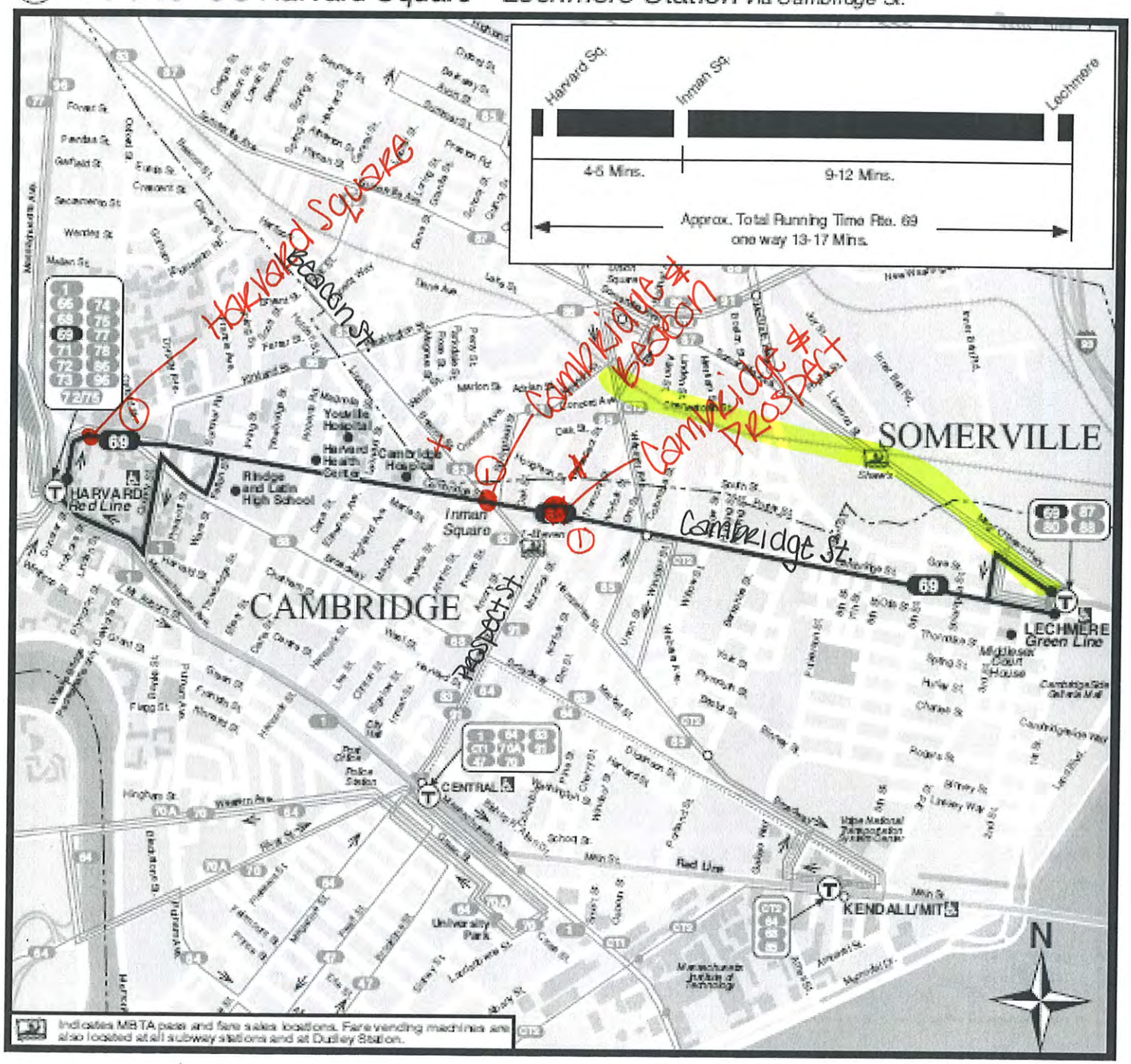
- Bus Route Maps to Lechmere with Passenger Starting Locations
- Walking Routes to Lechmere with Passenger Starting Location

Bus Route Maps to Lechmere with Passenger Starting Locations

~~Passengers Traveling to Lechmere~~

Passengers Traveling to Lechmere

Route 69 *Harvard Square - Lechmere Station via Cambridge St.*

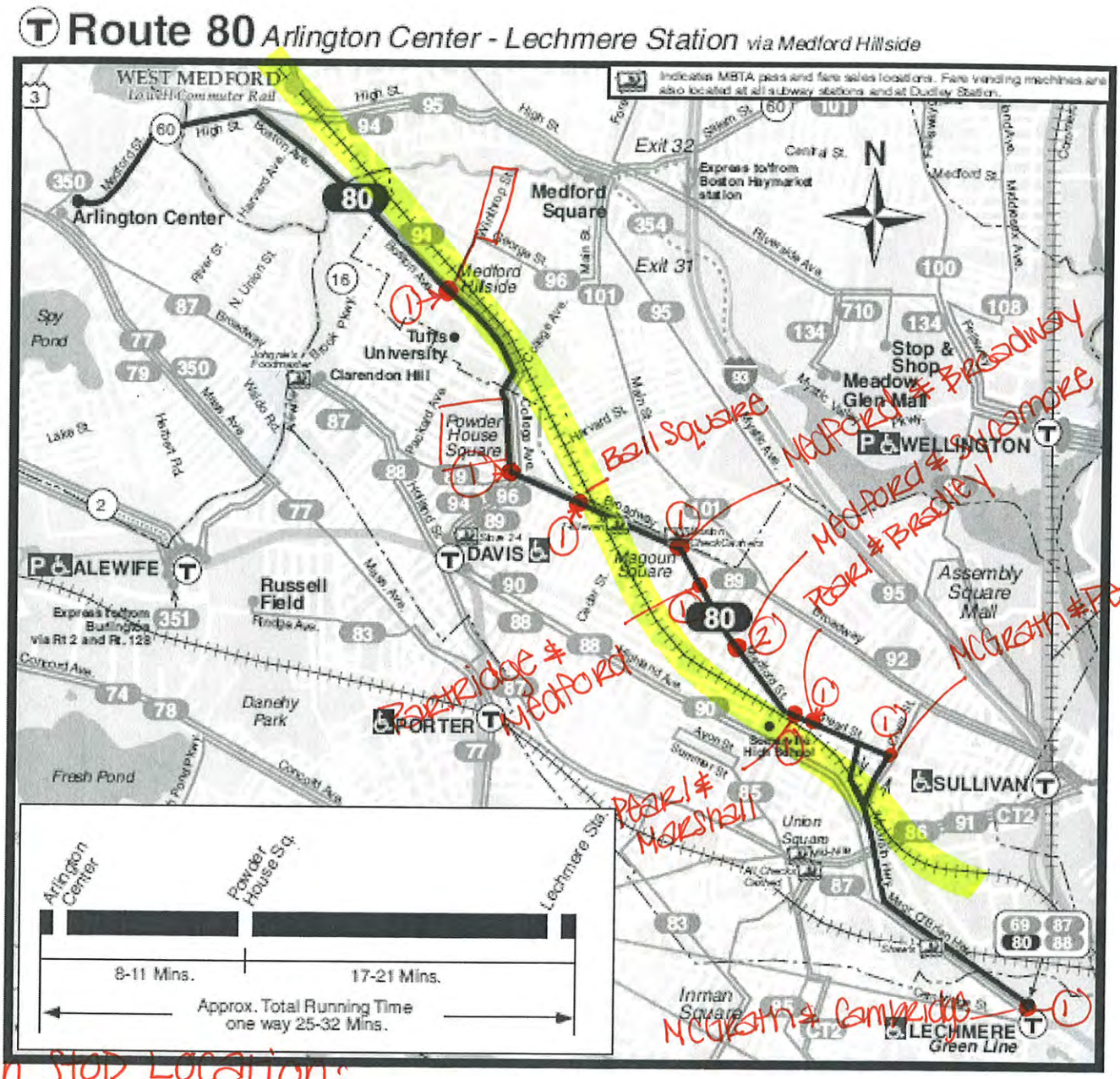


total travelers to lechmere = 5

Unknown stop locations:

#travelers	street
2	Cambridge St.

Passengers Traveling to Lechmere



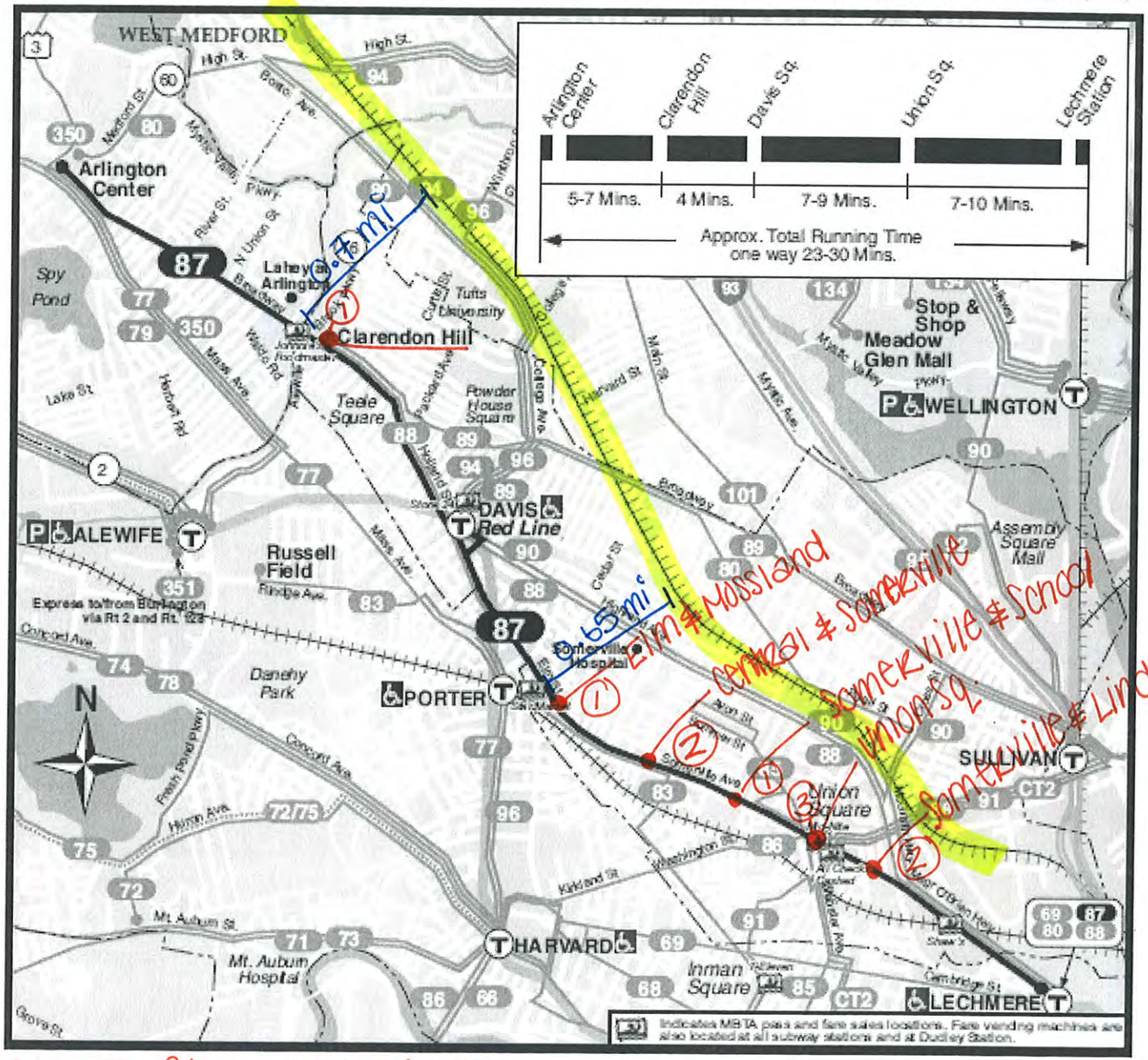
Unknown Stop Location:

# travelers	street
1	high st.
1	boston ave.
1	McGrath Hwy
2	Somerville
1	Medford St.
1	School St.
1	Bartlett St.

total travelers to lechmere = 19

Passengers Traveling to Lechmere

Route 87 Arlington Center or Clarendon Hill - Lechmere Station via Somerville Ave.



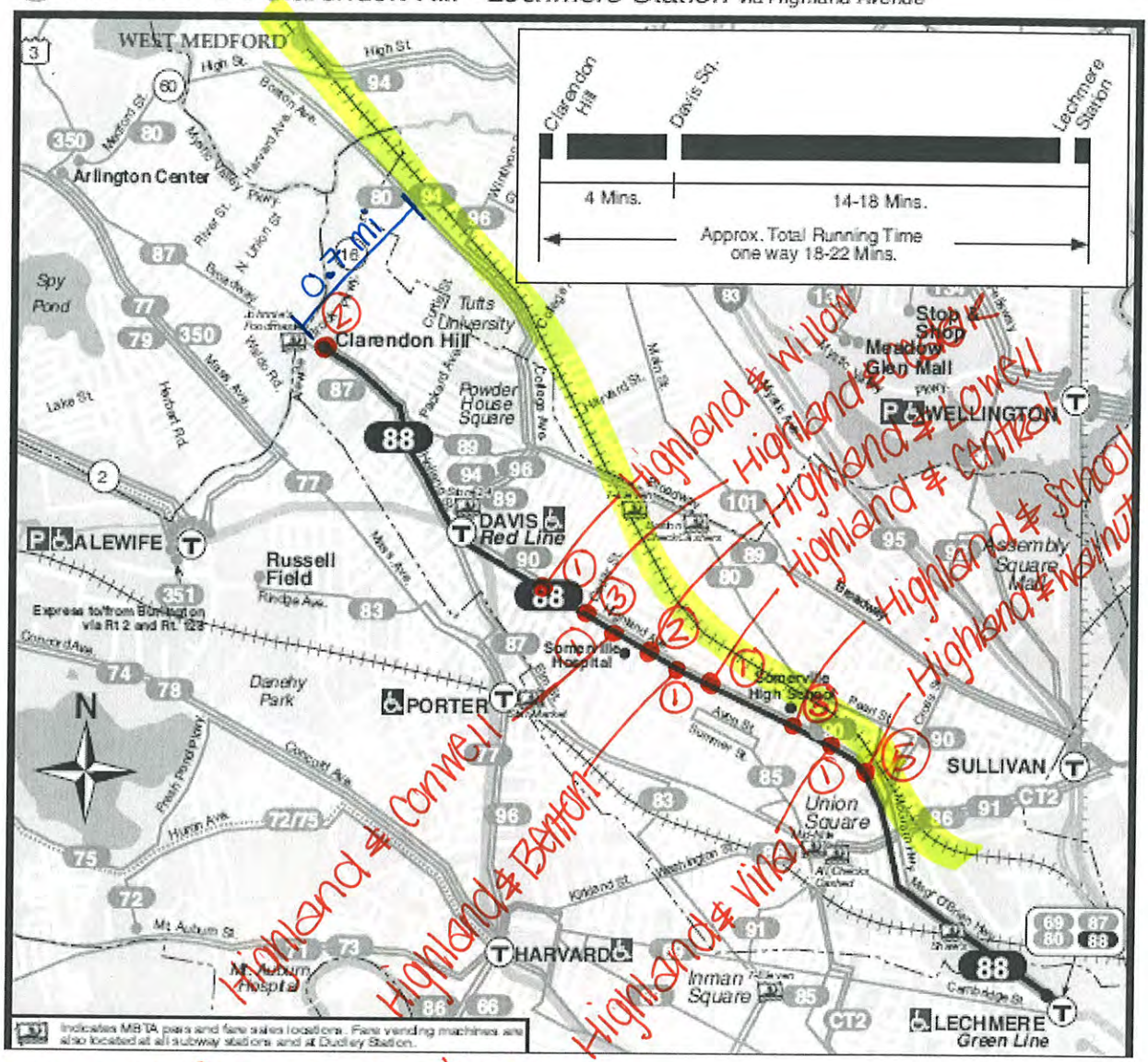
Unknown Stop Locations:

#travelers	Street
1	Somerville Ave.

total travelers to lechmere = [redacted] 11

Passengers Traveling to Lechmere

Route 88 *Clarendon Hill - Lechmere Station via Highland Avenue*



Unknown Stop Locations:

# travelers	Street
1	McGrath Hwy
5	Highland Ave

total travelers to lechmere = 26

Walking Routes to Lechmere with Passenger Starting Locations

10303.03

Existing 2010

(#) number peds

total peds: ~~92~~
pink = ~~20~~
orange = 23
yellow = 23
blue = ~~16~~
green = 10

East Somerville → 1 Fitchburg St

5 walkers from somerville

Gore Park

Hampton Inn Boston/ Cambridge

Monsignor O'Brien Hwy

Cambridge St

Jefferson St

Winter St

Gore St

Otis St

Thorndike St

Spring St

Hurley St

Charles St

Bent St

Rogers St

Binney St

Munroe St

Linskey Way

Potter St

Pedestrian Walk

Broadway

Hampshire St

Berkshire St

York St

Cornelius Way

Plymouth St

Berkshire Pl

Hungry Mother

The Blue Room

Hill Bldg

John A Ahern Field

Broad Institute

Emmet Pl

Akamai TECHNOLOGIES

Connelly Field

Certainn Park

Canal Park

Charles River Reservation

Best Buy

Sears

Dante

Industrial Park

Glassworks Ave

East St

Leighton St

Commercial Ave

Edwin H Land Blvd

Cambridge Pkwy

Charles River Bike Path

Water St

Rufo Rd

Bacon Ct

Sciarappa St

Lopez Ave

Porter St

South St

Harding St

Horace St

Hunting St

Willow St

Medford St

Lambert St

Max Ave

Marion St

Warren St

Cardinal Medeiros Ave

Fulkerson St

Windsor St.

Everkleze Way

25%

26%

5%

2%

500ft
200m

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- Walk 1. Based on Green Line Passenger Survey data for Lechmere Station.

10303.03

Build

25% peds use crosswalk at First St.

64% peds use 2nd St. crosswalk

11% DO NOT cross Obrien

5 walkers from Somerville

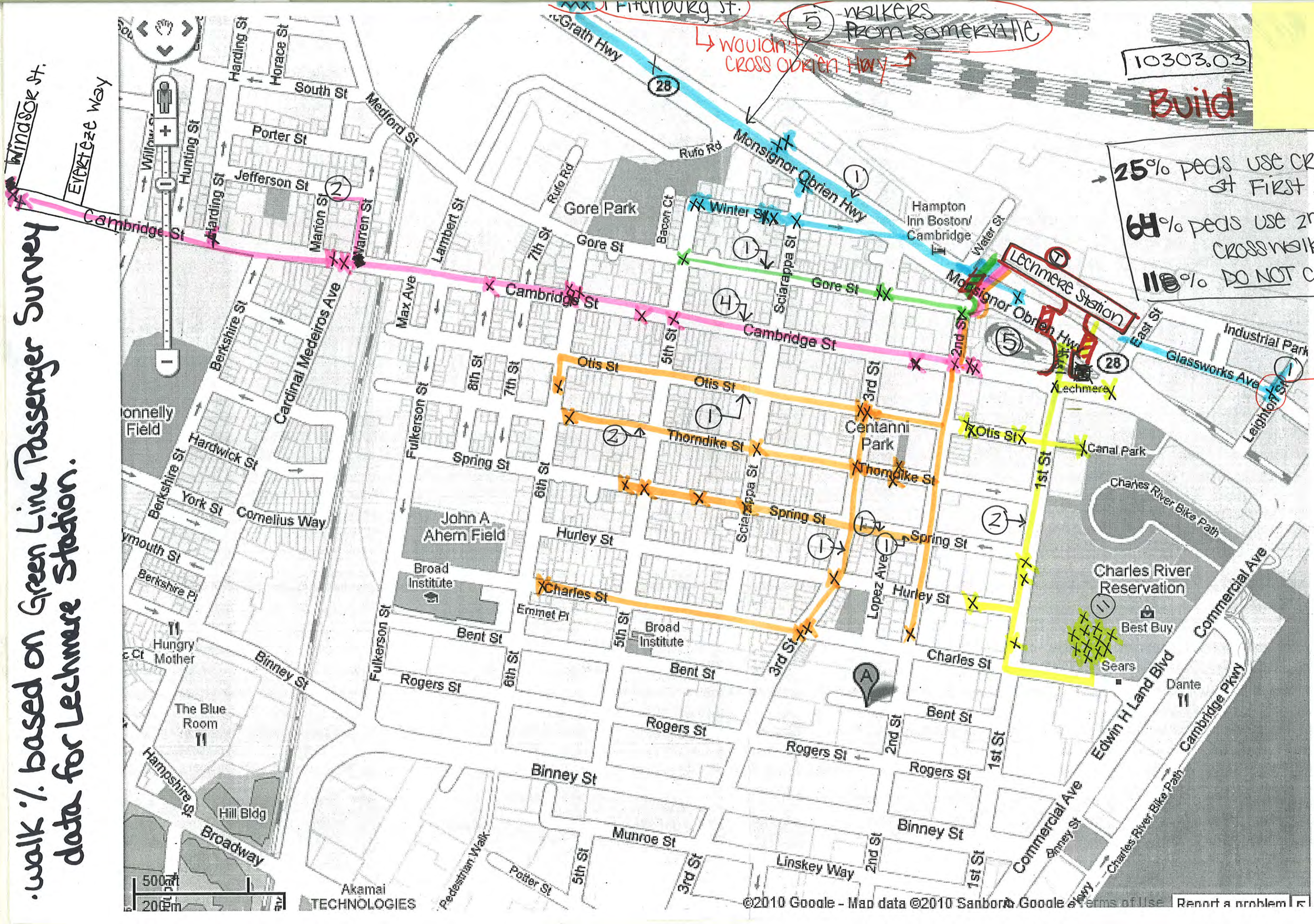
↳ wouldn't cross Obrien Hwy

Fitchburg St.

Lechmere Station

↳ wouldn't cross Obrien Hwy.

.walk % based on Green Line Passenger Survey data for Lechmere Station.



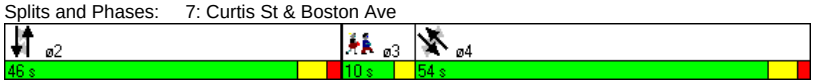
Mitigation

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR	ø3
Lane Configurations													
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	14	14	14	12	12	12	12	12	12	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Leading Detector (ft)	50	50		50	50		50	50		50	50		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Right Turn on Red			No			No			No			No	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1296			2357			1456			2234		
Travel Time (s)		29.5			53.6			33.1			50.8		
Volume (vph)	10	350	65	130	120	85	200	420	25	35	190	90	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.93	0.93	0.93	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	5%	5%	5%	
Lane Group Flow (vph)	0	518	0	0	381	0	0	687	0	38	301	0	
Turn Type	Perm			Perm			Perm			Perm			
Protected Phases		2			2			4			4		3
Permitted Phases	2			2			4			4			
Detector Phases	2	2		2	2		4	4		4	4		
Minimum Initial (s)	10.0	10.0		10.0	10.0		30.0	30.0		30.0	30.0		2.0
Minimum Split (s)	17.0	17.0		17.0	17.0		44.0	44.0		44.0	44.0		10.0
Total Split (s)	46.0	46.0	0.0	46.0	46.0	0.0	54.0	54.0	0.0	54.0	54.0	0.0	10.0
Total Split (%)	41.8%	41.8%	0.0%	41.8%	41.8%	0.0%	49.1%	49.1%	0.0%	49.1%	49.1%	0.0%	9%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0		3.0
All-Red Time (s)	2.1	2.1		2.1	2.1		2.0	2.0		2.0	2.0		0.0
Lead/Lag							Lag	Lag		Lag	Lag		Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes		Yes
Recall Mode	None	None		None	None		Max	Max		Max	Max		None
v/c Ratio		0.73			1.09			1.18		0.12	0.37		
Control Delay		34.8			108.7			127.4		18.3	20.0		
Queue Delay		0.0			0.0			0.0		0.0	0.0		
Total Delay		34.8			108.7			127.4		18.3	20.0		
Queue Length 50th (ft)		268			~267			~515		13	114		
Queue Length 95th (ft)		394			#490			#836		38	211		
Internal Link Dist (ft)		1216			2277			1376			2154		
Turn Bay Length (ft)													
Base Capacity (vph)		712			348			580		311	814		
Starvation Cap Reductn		0			0			0		0	0		
Spillback Cap Reductn		0			0			0		0	0		
Storage Cap Reductn		0			0			0		0	0		
Reduced v/c Ratio		0.73			1.09			1.18		0.12	0.37		

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 104
Natural Cycle: 150
Control Type: Semi Act-Uncoord
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Curtis St & Boston Ave



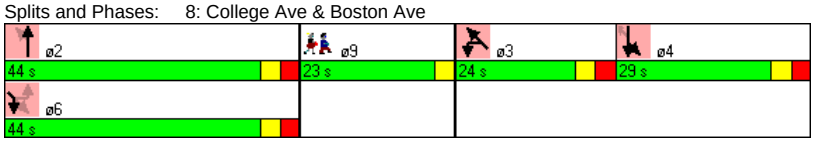
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	14	14	14	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0		5.0	5.0	
Lane Util. Factor		1.00			1.00			1.00		1.00	1.00	
Frt		0.98			0.97			0.99		1.00	0.95	
Flt Protected		1.00			0.98			0.98		0.95	1.00	
Satd. Flow (prot)		1822			1882			1807		1719	1722	
Flt Permitted		0.99			0.48			0.68		0.37	1.00	
Satd. Flow (perm)		1803			920			1253		667	1722	
Volume (vph)	10	350	65	130	120	85	200	420	25	35	190	90
Peak-hour factor, PHF	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	12	427	79	148	136	97	213	447	27	38	204	97
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	518	0	0	381	0	0	687	0	38	301	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	5%	5%	5%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)		40.0			40.0			48.1		48.1	48.1	
Effective Green, g (s)		41.1			41.1			49.1		49.1	49.1	
Actuated g/C Ratio		0.39			0.39			0.46		0.46	0.46	
Clearance Time (s)		6.1			6.1			6.0		6.0	6.0	
Vehicle Extension (s)		1.0			1.0			4.0		4.0	4.0	
Lane Grp Cap (vph)		700			357			581		310	799	
v/s Ratio Prot											0.17	
v/s Ratio Perm		0.29			c0.41			c0.55		0.06		
v/c Ratio		0.74			1.07			1.18		0.12	0.38	
Uniform Delay, d1		27.8			32.3			28.3		16.1	18.4	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		3.7			66.6			98.8		0.8	1.4	
Delay (s)		31.5			99.0			127.1		16.9	19.8	
Level of Service		C			F			F		B	B	
Approach Delay (s)		31.5			99.0			127.1			19.4	
Approach LOS		C			F			F			B	

Intersection Summary			
HCM Average Control Delay	76.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	15.6
Intersection Capacity Utilization	118.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR	ø9
Lane Configurations													
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	14	14	14	12	12	11	14	14	14	
Grade (%)		0%			0%			0%			2%		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50		
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0		
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1064			1813			2234			1738		
Travel Time (s)		24.2			41.2			50.8			39.5		
Volume (vph)	75	130	5	60	330	85	70	355	215	10	185	35	
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.87	0.87	0.87	0.74	0.74	0.74	
Heavy Vehicles (%)	1%	2%	1%	2%	2%	2%	2%	3%	3%	1%	1%	2%	
Lane Group Flow (vph)	83	150	0	0	438	96	0	488	247	0	311	0	
Turn Type	Perm			Split		Perm	custom		custom	Split			
Protected Phases		2		4	4				6	3	3		9
Permitted Phases	2					4	6	6					
Detector Phases	2	2		4	4	4	6	6	6	3	3		
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		2.0
Minimum Split (s)	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	23.0	23.0		22.0
Total Split (s)	44.0	44.0	0.0	29.0	29.0	29.0	44.0	44.0	44.0	24.0	24.0	0.0	23.0
Total Split (%)	36.7%	36.7%	0.0%	24.2%	24.2%	24.2%	36.7%	36.7%	36.7%	20.0%	20.0%	0.0%	19%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		0.0
Lead/Lag				Lag	Lag	Lag				Lead	Lead		
Lead-Lag Optimize?				Yes	Yes	Yes				Yes	Yes		
Recall Mode	Min	Min		Min	Min	Min	Min	Min	Min	None	None		None
v/c Ratio	0.12	0.21			0.97	0.21		1.00	0.39		0.88		
Control Delay	23.1	23.7			76.8	10.4		73.0	15.7		67.5		
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0		
Total Delay	23.1	23.7			76.8	10.4		73.0	15.7		67.5		
Queue Length 50th (ft)	32	59			266	3		288	56		184		
Queue Length 95th (ft)	84	139			#587	50		#626	149		#316		
Internal Link Dist (ft)		984			1733			2154			1658		
Turn Bay Length (ft)													
Base Capacity (vph)	710	700			450	454		490	640		352		
Starvation Cap Reductn	0	0			0	0		0	0		0		
Spillback Cap Reductn	0	0			0	0		0	0		0		
Storage Cap Reductn	0	0			0	0		0	0		0		
Reduced v/c Ratio	0.12	0.21			0.97	0.21		1.00	0.39		0.88		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 101.4	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 8: College Ave & Boston Ave



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	14	14	14	12	12	11	14	14	14
Grade (%)		0%			0%			0%			2%	
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0	6.0		6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	1.00		1.00	
Frt	1.00	0.99			1.00	0.85		1.00	0.85		0.98	
Flt Protected	0.95	1.00			0.99	1.00		0.99	1.00		1.00	
Satd. Flow (prot)	1787	1852			1972	1689		1833	1516		1939	
Flt Permitted	1.00	1.00			0.99	1.00		0.70	1.00		1.00	
Satd. Flow (perm)	1881	1852			1972	1689		1299	1516		1939	
Volume (vph)	75	130	5	60	330	85	70	355	215	10	185	35
Peak-hour factor, PHF	0.90	0.90	0.90	0.89	0.89	0.89	0.87	0.87	0.87	0.74	0.74	0.74
Adj. Flow (vph)	83	144	6	67	371	96	80	408	247	14	250	47
RTOR Reduction (vph)	0	1	0	0	0	69	0	0	68	0	5	0
Lane Group Flow (vph)	83	149	0	0	438	27	0	488	179	0	306	0
Heavy Vehicles (%)	1%	2%	1%	2%	2%	2%	2%	3%	3%	1%	1%	2%
Turn Type	Perm			Split		Perm	custom		custom	Split		
Protected Phases		2		4	4				6	3	3	
Permitted Phases	2					4	6	6				
Actuated Green, G (s)	38.3	38.3			23.2	23.2		38.3	38.3		18.1	
Effective Green, g (s)	38.3	38.3			23.2	23.2		38.3	38.3		18.1	
Actuated g/C Ratio	0.37	0.37			0.22	0.22		0.37	0.37		0.17	
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0			5.0	5.0		3.0	3.0		2.0	
Lane Grp Cap (vph)	694	683			441	378		479	559		338	
v/s Ratio Prot		0.08			c0.22				0.12		c0.16	
v/s Ratio Perm	0.04					0.02		c0.38				
v/c Ratio	0.12	0.22			0.99	0.07		1.02	0.32		0.91	
Uniform Delay, d1	21.6	22.5			40.2	31.8		32.8	23.4		42.0	
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.1	0.2			41.0	0.2		45.9	0.3		26.0	
Delay (s)	21.7	22.6			81.2	32.0		78.7	23.8		68.0	
Level of Service	C	C			F	C		E	C		E	
Approach Delay (s)		22.3			72.4			60.2			68.0	
Approach LOS		C			E			E			E	

Intersection Summary			
HCM Average Control Delay	60.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	103.8	Sum of lost time (s)	24.2
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

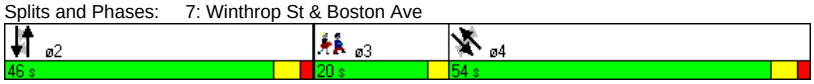
c Critical Lane Group

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR	ø3
Lane Configurations													
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	14	14	14	12	12	12	12	12	12	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Leading Detector (ft)	50	50		50	50		50	50		50	50		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Right Turn on Red			No			No			No			No	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1296			2357			1456			2216		
Travel Time (s)		29.5			53.6			33.1			50.4		
Volume (vph)	80	110	140	35	410	60	50	370	150	200	355	30	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.91	0.91	0.91	0.94	0.94	0.94	
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	2%	2%	2%	2%	2%	2%	
Lane Group Flow (vph)	0	359	0	0	588	0	0	627	0	213	410	0	
Turn Type	Perm			Perm			Perm			Perm			
Protected Phases		2			2			4			4		3
Permitted Phases	2			2			4			4			
Detector Phases	2	2		2	2		4	4		4	4		
Minimum Initial (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0		4.0
Minimum Split (s)	36.1	36.1		36.1	36.1		44.0	44.0		44.0	44.0		20.0
Total Split (s)	46.0	46.0	0.0	46.0	46.0	0.0	54.0	54.0	0.0	54.0	54.0	0.0	20.0
Total Split (%)	38.3%	38.3%	0.0%	38.3%	38.3%	0.0%	45.0%	45.0%	0.0%	45.0%	45.0%	0.0%	17%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0		3.0
All-Red Time (s)	2.1	2.1		2.1	2.1		2.0	2.0		2.0	2.0		0.0
Lead/Lag							Lag	Lag		Lag	Lag		Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes		Yes
Recall Mode	None	None		None	None		Max	Max		Max	Max		None
v/c Ratio		0.98			0.82			0.96		0.88	0.49		
Control Delay		77.0			42.3			58.6		65.2	24.7		
Queue Delay		0.0			0.0			0.0		0.0	0.0		
Total Delay		77.0			42.3			58.6		65.2	24.7		
Queue Length 50th (ft)		211			315			351		112	165		
Queue Length 95th (ft)		#505			#599			#771		#326	339		
Internal Link Dist (ft)		1216			2277			1376			2136		
Turn Bay Length (ft)													
Base Capacity (vph)		368			720			650		242	842		
Starvation Cap Reductn		0			0			0		0	0		
Spillback Cap Reductn		0			0			0		0	0		
Storage Cap Reductn		0			0			0		0	0		
Reduced v/c Ratio		0.98			0.82			0.96		0.88	0.49		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 108
Natural Cycle: 145
Control Type: Semi Act-Uncoord
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Winthrop St & Boston Ave



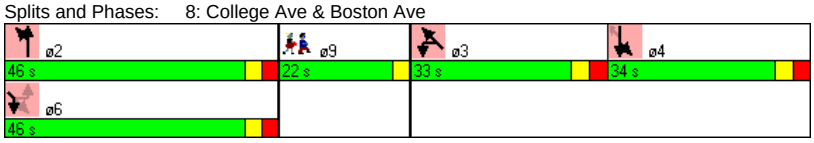
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	14	14	14	12	12	12	12	12	12
Total Lost time (s)		5.0			5.0			5.0		5.0	5.0	
Lane Util. Factor		1.00			1.00			1.00		1.00	1.00	
Frt		0.94			0.98			0.96		1.00	0.99	
Flt Protected		0.99			1.00			1.00		0.95	1.00	
Satd. Flow (prot)		1752			1987			1789		1770	1841	
Flt Permitted		0.60			0.95			0.87		0.31	1.00	
Satd. Flow (perm)		1071			1900			1566		586	1841	
Volume (vph)	80	110	140	35	410	60	50	370	150	200	355	30
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.86	0.86	0.91	0.91	0.91	0.94	0.94	0.94
Adj. Flow (vph)	87	120	152	41	477	70	55	407	165	213	378	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	359	0	0	588	0	0	627	0	213	410	0
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	2%	2%	2%	2%	2%	2%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)		40.2			40.2			48.4		48.4	48.4	
Effective Green, g (s)		41.3			41.3			49.4		49.4	49.4	
Actuated g/C Ratio		0.38			0.38			0.45		0.45	0.45	
Clearance Time (s)		6.1			6.1			6.0		6.0	6.0	
Vehicle Extension (s)		1.0			1.0			4.0		4.0	4.0	
Lane Grp Cap (vph)		403			715			705		264	828	
v/s Ratio Prot											0.22	
v/s Ratio Perm		c0.34			0.31			c0.40		0.36		
v/c Ratio		0.89			0.82			0.89		0.81	0.50	
Uniform Delay, d1		32.1			30.9			27.7		26.1	21.4	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		20.6			7.2			15.6		22.6	2.1	
Delay (s)		52.7			38.2			43.3		48.7	23.5	
Level of Service		D			D			D		D	C	
Approach Delay (s)		52.7			38.2			43.3			32.1	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	40.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	109.8	Sum of lost time (s)	19.1
Intersection Capacity Utilization	110.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR	ø9
Lane Configurations													
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	14	14	14	12	12	11	14	14	14	
Grade (%)		0%			0%			0%			2%		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50		
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0		
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Right Turn on Red			Yes			Yes			Yes			Yes	
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1030			1798			2216			1738		
Travel Time (s)		23.4			40.9			50.4			39.5		
Volume (vph)	155	235	1	30	215	125	110	195	125	10	320	55	
Peak Hour Factor	0.93	0.92	0.93	0.91	0.91	0.91	0.89	0.89	0.89	0.89	0.89	0.89	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	2%	
Lane Group Flow (vph)	167	256	0	0	269	137	0	343	140	0	433	0	
Turn Type	Split			Split		Perm	custom		custom	Split			
Protected Phases	2	2		4	4				6	3	3		9
Permitted Phases						4	6	6					
Detector Phases	2	2		4	4	4	6	6	6	3	3		
Minimum Initial (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		4.0
Minimum Split (s)	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		22.0
Total Split (s)	46.0	46.0	0.0	34.0	34.0	34.0	46.0	46.0	46.0	33.0	33.0	0.0	22.0
Total Split (%)	34.1%	34.1%	0.0%	25.2%	25.2%	25.2%	34.1%	34.1%	34.1%	24.4%	24.4%	0.0%	16%
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		0.0
Lead/Lag				Lag	Lag	Lag				Lead	Lead		
Lead-Lag Optimize?				Yes	Yes	Yes				Yes	Yes		
Recall Mode	Min	Min		Min	Min	Min	Min	Min	Min	None	None		None
v/c Ratio	0.27	0.39			0.73	0.32		0.89	0.23		0.92		
Control Delay	31.9	33.7			57.6	9.2		63.1	11.0		70.3		
Queue Delay	0.0	0.0			0.0	0.0		0.0	0.0		0.0		
Total Delay	31.9	33.7			57.6	9.2		63.1	11.0		70.3		
Queue Length 50th (ft)	77	124			171	0		208	14		278		
Queue Length 95th (ft)	179	269			316	55		#513	71		#627		
Internal Link Dist (ft)		950			1718			2136			1658		
Turn Bay Length (ft)													
Base Capacity (vph)	623	655			457	497		387	609		470		
Starvation Cap Reductn	0	0			0	0		0	0		0		
Spillback Cap Reductn	0	0			0	0		0	0		0		
Storage Cap Reductn	0	0			0	0		0	0		0		
Reduced v/c Ratio	0.27	0.39			0.59	0.28		0.89	0.23		0.92		

Intersection Summary	
Area Type:	Other
Cycle Length: 135	
Actuated Cycle Length: 115.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
#	95th percentile volume exceeds capacity, queue may be longer.
	Queue shown is maximum after two cycles.

Splits and Phases: 8: College Ave & Boston Ave





Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	14	14	14	12	12	11	14	14	14
Grade (%)		0%			0%			0%			2%	
Total Lost time (s)	6.0	6.0			6.0	6.0		6.0	6.0		6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00		1.00	1.00		1.00	
Frt	1.00	1.00			1.00	0.85		1.00	0.85		0.98	
Flt Protected	0.95	1.00			0.99	1.00		0.98	1.00		1.00	
Satd. Flow (prot)	1770	1862			1975	1689		1830	1531		1960	
Flt Permitted	0.95	1.00			0.99	1.00		0.62	1.00		1.00	
Satd. Flow (perm)	1770	1862			1975	1689		1159	1531		1960	
Volume (vph)	155	235	1	30	215	125	110	195	125	10	320	55
Peak-hour factor, PHF	0.93	0.92	0.93	0.91	0.91	0.91	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	167	255	1	33	236	137	124	219	140	11	360	62
RTOR Reduction (vph)	0	0	0	0	0	112	0	0	71	0	5	0
Lane Group Flow (vph)	167	256	0	0	269	25	0	343	69	0	428	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	2%
Turn Type	Split			Split		Perm	custom		custom	Split		
Protected Phases	2	2		4	4				6	3	3	
Permitted Phases						4	6	6				
Actuated Green, G (s)	40.7	40.7			21.6	21.6		40.7	40.7		27.5	
Effective Green, g (s)	40.7	40.7			21.6	21.6		40.7	40.7		27.5	
Actuated g/C Ratio	0.35	0.35			0.18	0.18		0.35	0.35		0.23	
Clearance Time (s)	6.0	6.0			6.0	6.0		6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0			5.0	5.0		3.0	3.0		2.0	
Lane Grp Cap (vph)	614	646			364	311		402	531		460	
v/s Ratio Prot	0.09	0.14			c0.14				0.05		c0.22	
v/s Ratio Perm						0.01		c0.30				
v/c Ratio	0.27	0.40			0.74	0.08		0.85	0.13		0.93	
Uniform Delay, d1	27.6	29.0			45.2	39.6		35.5	26.2		44.0	
Progression Factor	1.00	1.00			1.00	1.00		1.00	1.00		1.00	
Incremental Delay, d2	0.2	0.4			9.2	0.2		15.9	0.1		25.4	
Delay (s)	27.9	29.4			54.4	39.9		51.5	26.3		69.4	
Level of Service	C	C			D	D		D	C		E	
Approach Delay (s)		28.8			49.5			44.2			69.4	
Approach LOS		C			D			D			E	

Intersection Summary			
HCM Average Control Delay	47.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	117.3	Sum of lost time (s)	27.5
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group