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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<sub>x</sub>) volatile organic compounds (VOCs), the chief precursors of smog, and of carbon dioxide (CO<sub>2</sub>), 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 Gollidge 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, identifying 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 foreseeable 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 for 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 at 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, NO<sub>x</sub>, CO<sub>2</sub>, carbon monoxide (CO), and particulate matter (PM<sub>10</sub>). 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<sub>10</sub> and PM<sub>2.5</sub> 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<sub>10</sub> concentrations are below the PM<sub>10</sub> NAAQS, and the 24-hour PM<sub>2.5</sub> concentrations are below the PM<sub>2.5</sub> NAAQS. The DEIR also evaluated the potential PM<sub>2.5</sub> air quality impacts associated with the relocation of the existing commuter rail tracks. While PM<sub>2.5</sub> emissions will increase at both the nearest property line and residential building, the annual and 24-hour PM<sub>2.5</sub> 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<sub>2</sub>, 7.6 kg/day for VOCs, 4.4 kg/day for NO<sub>x</sub>, and 0.8 kg/day for PM<sub>10</sub> 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 identified 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

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.

### Air Quality

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

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

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

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

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

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.

Comments/Circulation

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.

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 Georgopoulos                  |
| 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                         |

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, 2<sup>nd</sup> 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 Korczynski  
12/29/2009 Raymond Nagem – 2<sup>nd</sup> 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 – 2<sup>nd</sup> 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 – 2<sup>nd</sup> letter  
01/05/2010 Norman Fine  
01/05/2010 Chris Leary  
01/05/2010 Dan Tremiere  
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 – 2<sup>nd</sup> 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, 8<sup>th</sup> 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 – 2<sup>nd</sup> 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., 26<sup>th</sup> 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 – 2<sup>nd</sup> letter  
01/07/2010 Bathsheba Grossman – 2<sup>nd</sup> 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 – 2<sup>nd</sup> 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, 2<sup>nd</sup> Middlesex District (2<sup>nd</sup> letter)  
01/08/2010 Pan Am Railways  
01/08/2010 State Representative Carl M. Sciortino, Jr., 34<sup>th</sup> Middlesex District  
01/08/2010 State Representative Denise Provost, 27<sup>th</sup> 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 – 2<sup>nd</sup> 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 Gallagher  
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. (2<sup>nd</sup> 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