

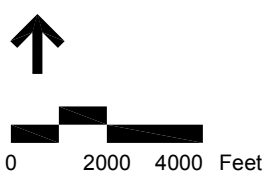
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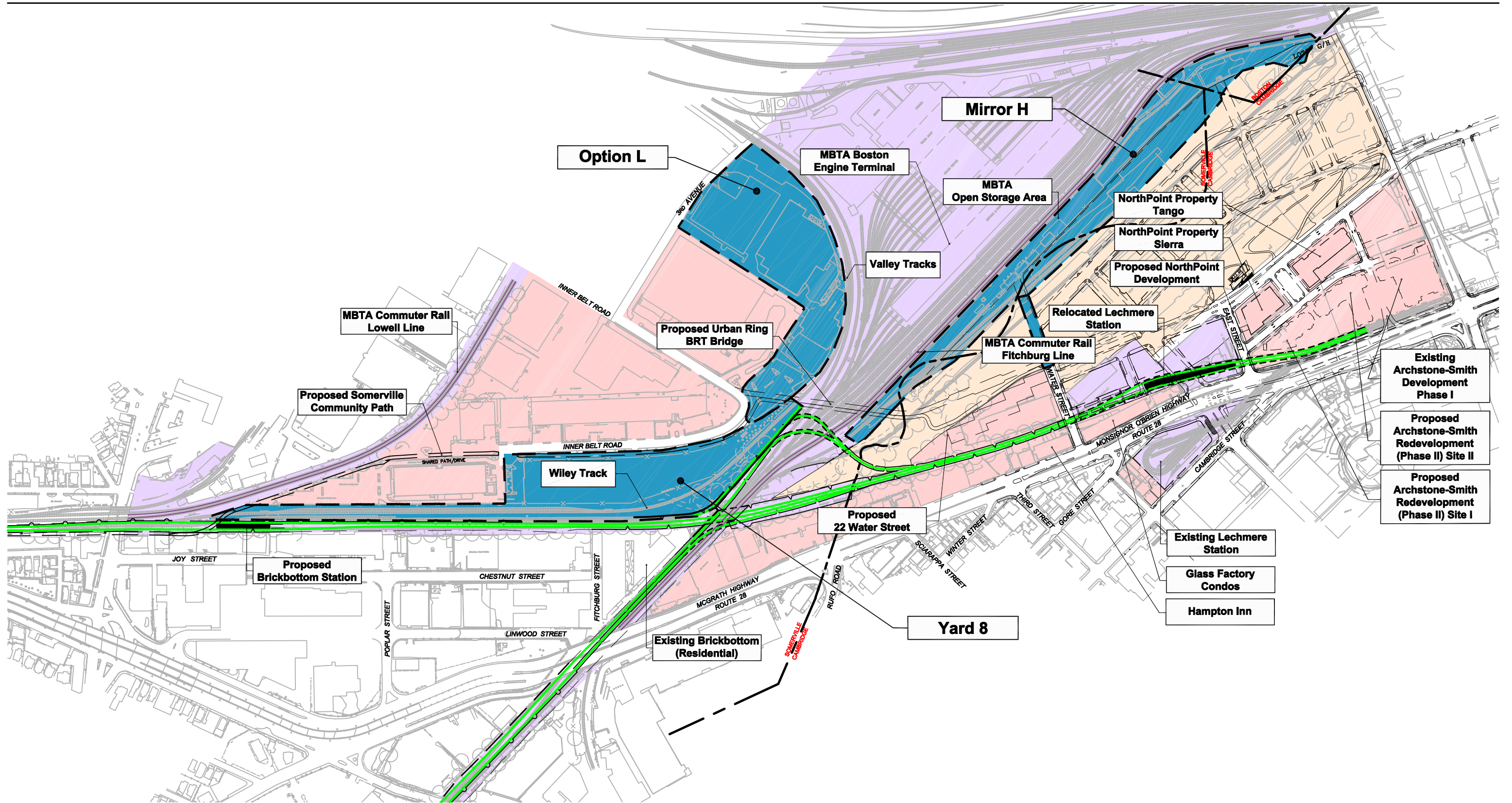
Green Line Extension Project

Figure 1-1
Proposed Project






- Legend**
- MBTA Green Line
 - MBTA Orange Line
 - MBTA Red Line
 - MBTA Blue Line
 - MBTA Silver Line
 - MBTA Commuter Rail Line
 - Green Line Proposed Project
 - Proposed Station
 - Proposed Maintenance Facility

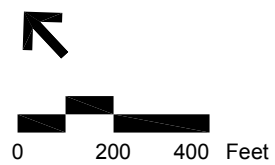


\\labos\projects\10303.00\graphics\FIGURES\Maintenance_Facility\1030300_Maint_Facility_Alt.dwg
Plotted: 5/21/2010 4:17 PM



LEGEND

-  M.B.T.A. Property
-  Pan Am Railways Property
-  Private Property
-  Alternative Sites
-  Proposed Green Line Extension

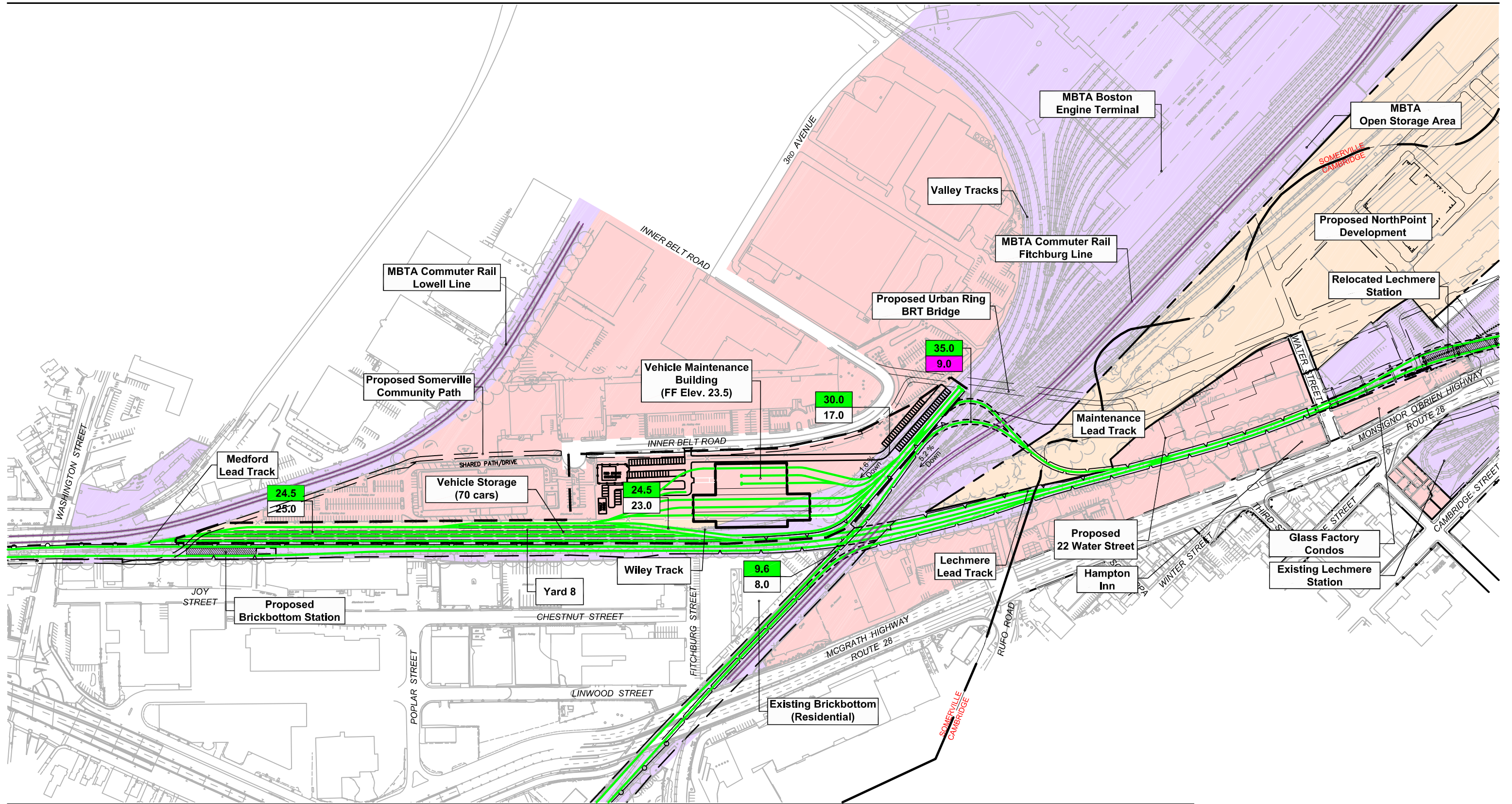


Green Line Extension Project











Figure 2-1
Additional Maintenance Facility Alternatives

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LEGEND

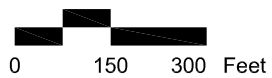
	M.B.T.A. Property		20.0	Proposed Elevation		10.0	Prop. Road Elevation
	Pan Am Railways Property		19.0	Existing Elevation		1.5% Down	Proposed Slope
	Private Property		8.0	Existing Commuter Rail Track Elevation			Alternative Site
							Proposed Green Line Extension



Green Line Extension Project

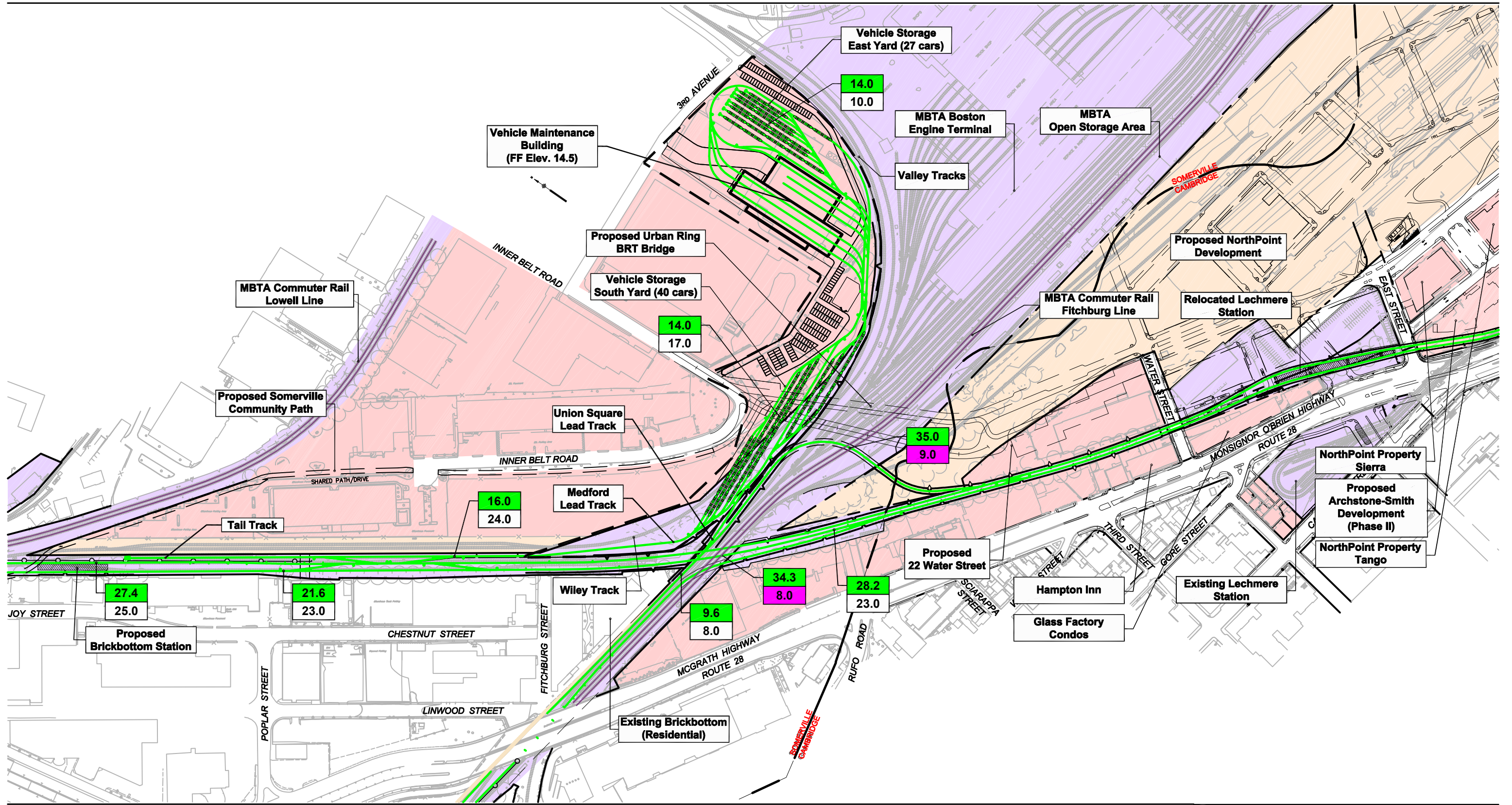
Figure 2-2

Maintenance Facility
Yard 8













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\\labos\projects\10303.00\graphics\FIGURES\Maintenance_Facility\1030300_Maint_Facility_OptL.dwg



LEGEND

	M.B.T.A. Property		20.0	Proposed Elevation		10.0	Prop. Road Elevation
	Pan Am Railways Property		19.0	Existing Elevation		1.5 % Down	Proposed Slope
	Private Property		8.0	Existing Commuter Rail Track Elevation			Alternative Site
							Proposed Green Line Extension



Green Line Extension Project

Figure 2-3

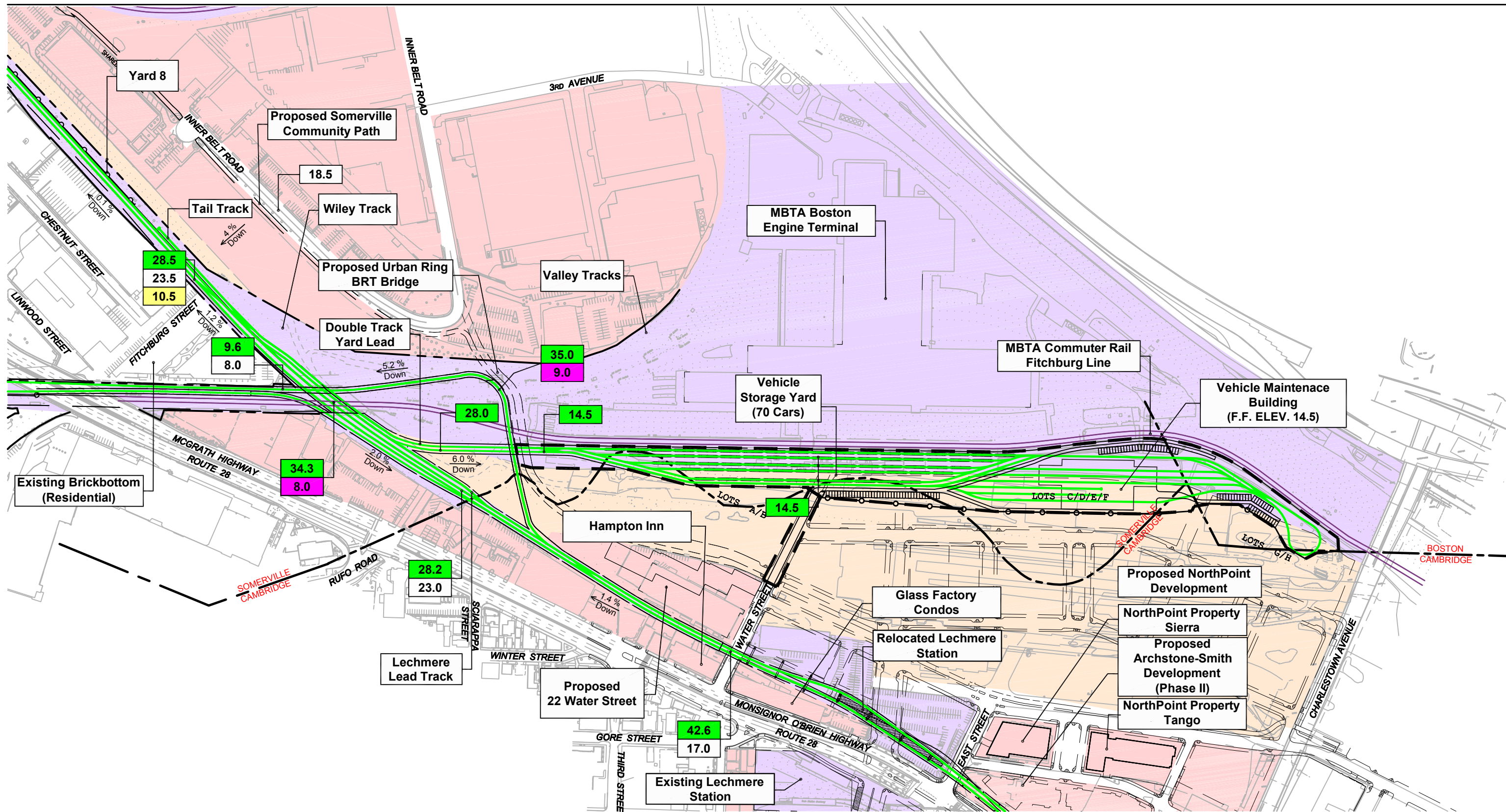
Maintenance Facility
Option L













0 150 300 Feet

Plotted: 5/21/2010 4:22 PM

\\mass\projects\10303.00\graphics\FIGURES\Maintenance_Facility\Option Mirror H Modified - Standard\Yard 7-Yard 8 Scheme H (Yard 7 Full Facility and Yard 8 Mirror draft).dwg



LEGEND

- | | | |
|--|--|---|
|  M.B.T.A. Property |  Proposed Elevation |  Prop. Road Elevation |
|  Pan Am Railways Property |  Existing Elevation |  Proposed Slope |
|  Private Property |  Existing Commuter Rail Track Elevation |  Alternative Site |
| | |  Proposed Green Line Extension |

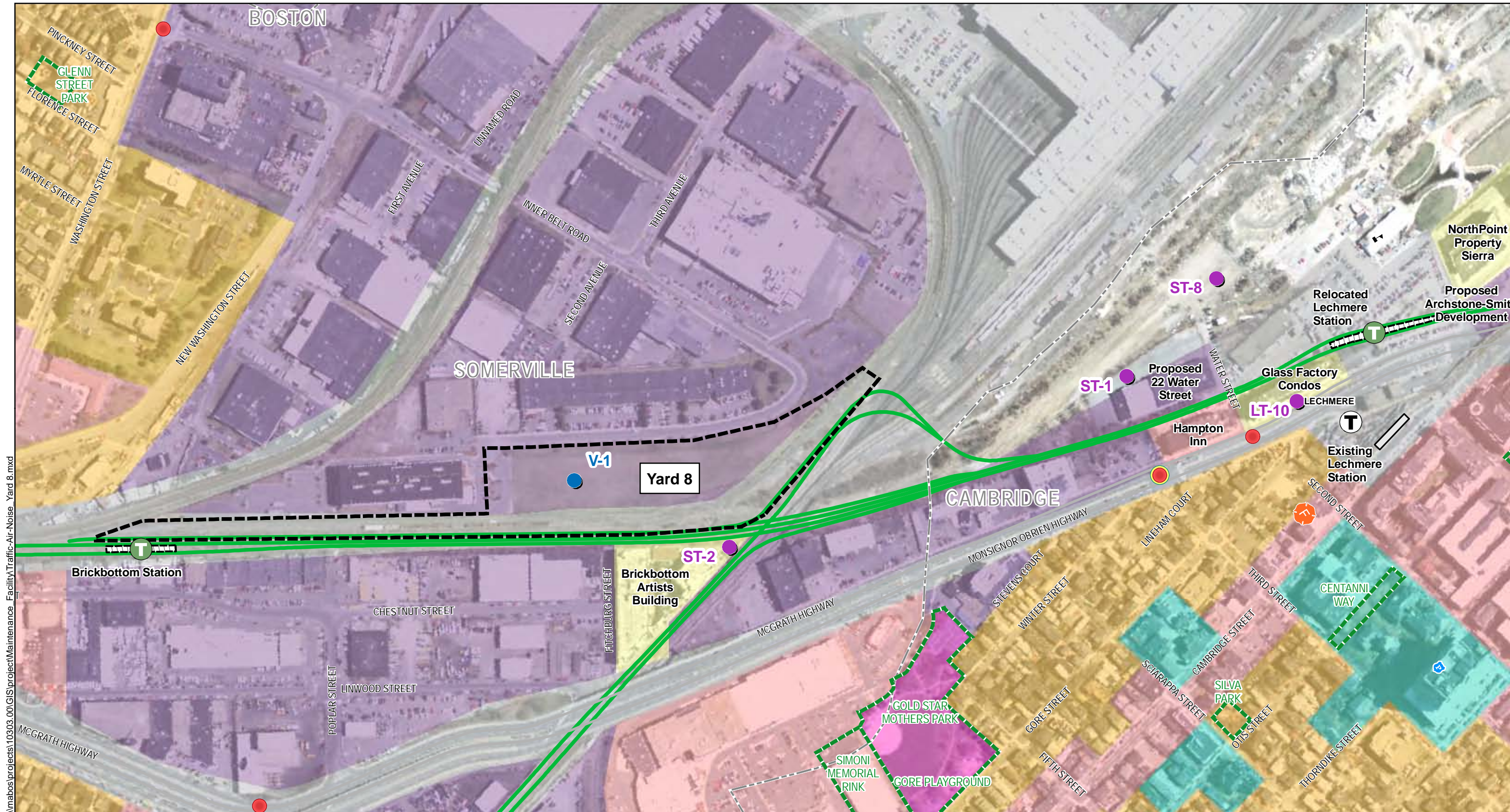


Green Line Extension Project

Figure 2-4
Maintenance Facility
Mirror H



0 150 300 Feet



\\nabos\projects\10303.00\GIS\project\Maintenance_Facility\Traffic-Air-Noise_Yard 8.mxd

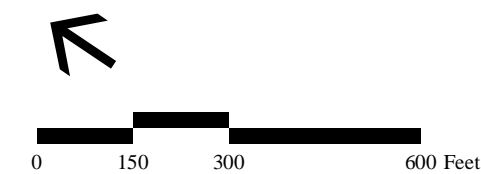


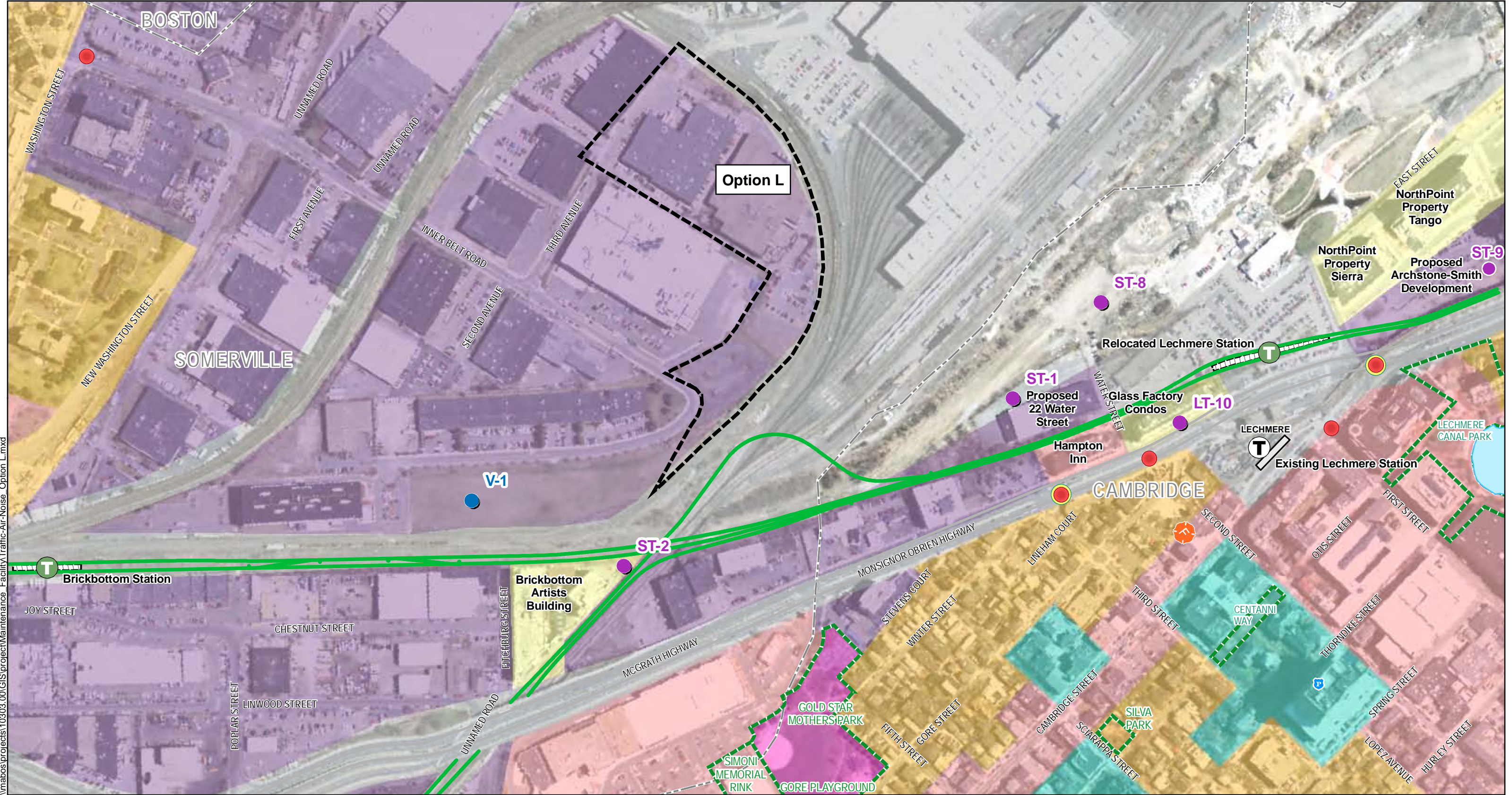
Green Line Extension Project

Figure 2-5

Environmental Setting - Yard 8 Maintenance Facility

Sources: MassGIS





\\nabos\projects\10303.00\GIS\project\Maintenance_Facility\Traffic-Air-Noise_Option_L.mxd

0

150

300

600 Feet

Proposed Station

Existing MBTA Station

Fire Stations

Police Stations

Proposed Green Line Extension

Municipal Boundaries

Alternative Site

Noise and Vibration Measurement Sites

Noise Measurement Site

Vibration Measurement Site

Combined Noise / Vibration Measurement Site

Land Use

Open Land

Participation Recreation

Spectator Recreation

Multi-Family Residential

High Density Residential

Commercial

Industrial

Transportation

Waste Disposal

Water

Parks / Urban Open / Public Land / Educational

Protected and Recreational Open Space

Traffic Study Intersections

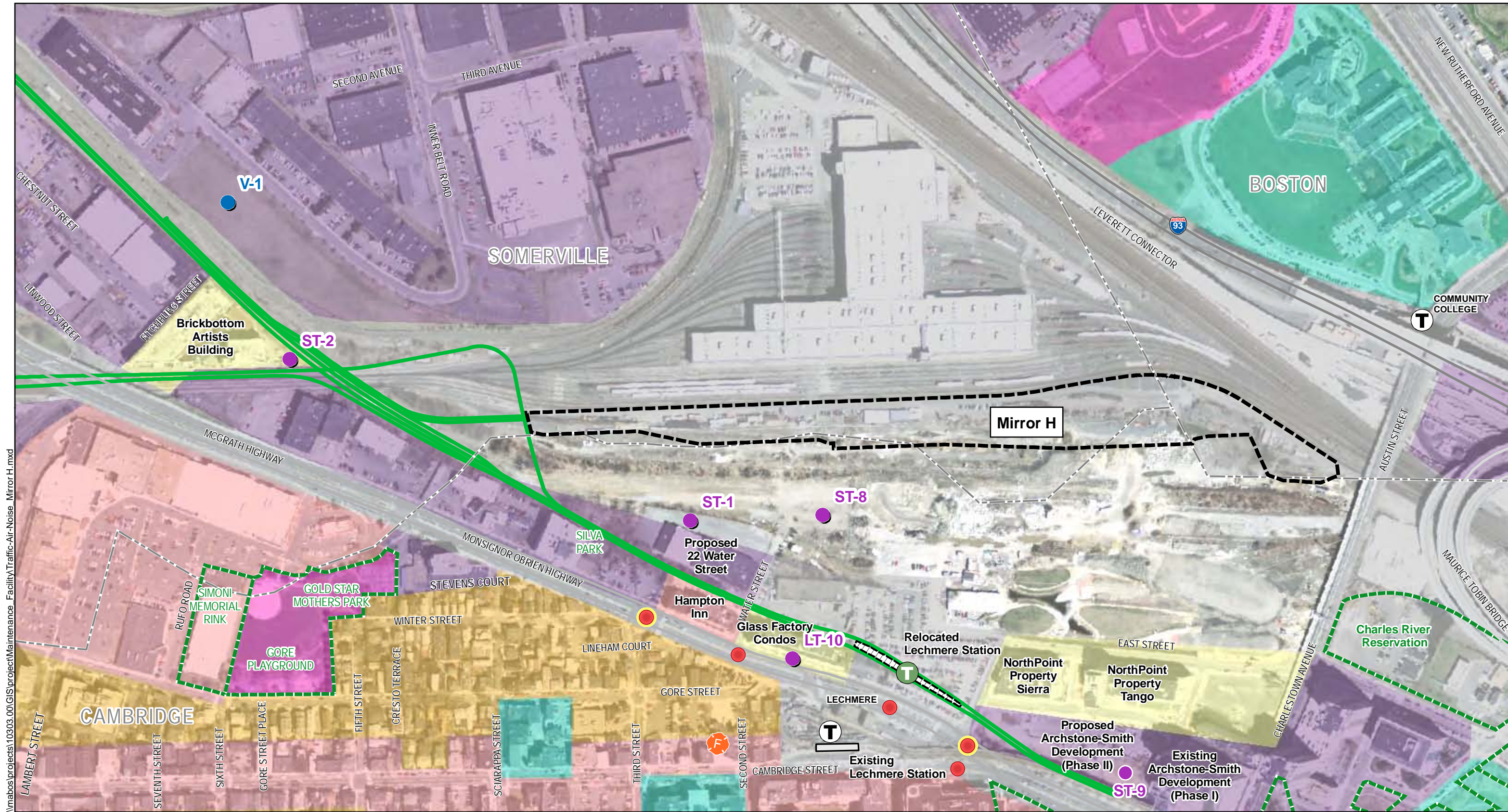
Microscale Air Quality Intersections

Moving Massachusetts Forward.
massDOT

Green Line Extension Project

Figure 2-6
Environmental Setting - Option L Maintenance Facility

Sources: MassGIS



\\nabos\projects\10303.00\GIS\project\Maintenance_Facility\Traffic-Air-Noise_Mirror H.mxd

Legend

- Proposed Station
- Existing MBTA Station
- Fire Stations
- Police Stations
- Proposed Green Line Extension

Municipal Boundaries

Alternative Site

Noise and Vibration Measurement Sites

- Noise Measurement Site
- Vibration Measurement Site
- Combined Noise / Vibration Measurement Site

Land Use

- Open Land
- Participation Recreation
- Spectator Recreation
- Multi-Family Residential
- High Density Residential
- Commercial
- Industrial

Transportation

- Transportation
- Waste Disposal
- Water
- Parks / Urban Open / Public Land / Educational
- Protected and Recreational Open Space
- Traffic Study Intersections
- Microscale Air Quality Intersections

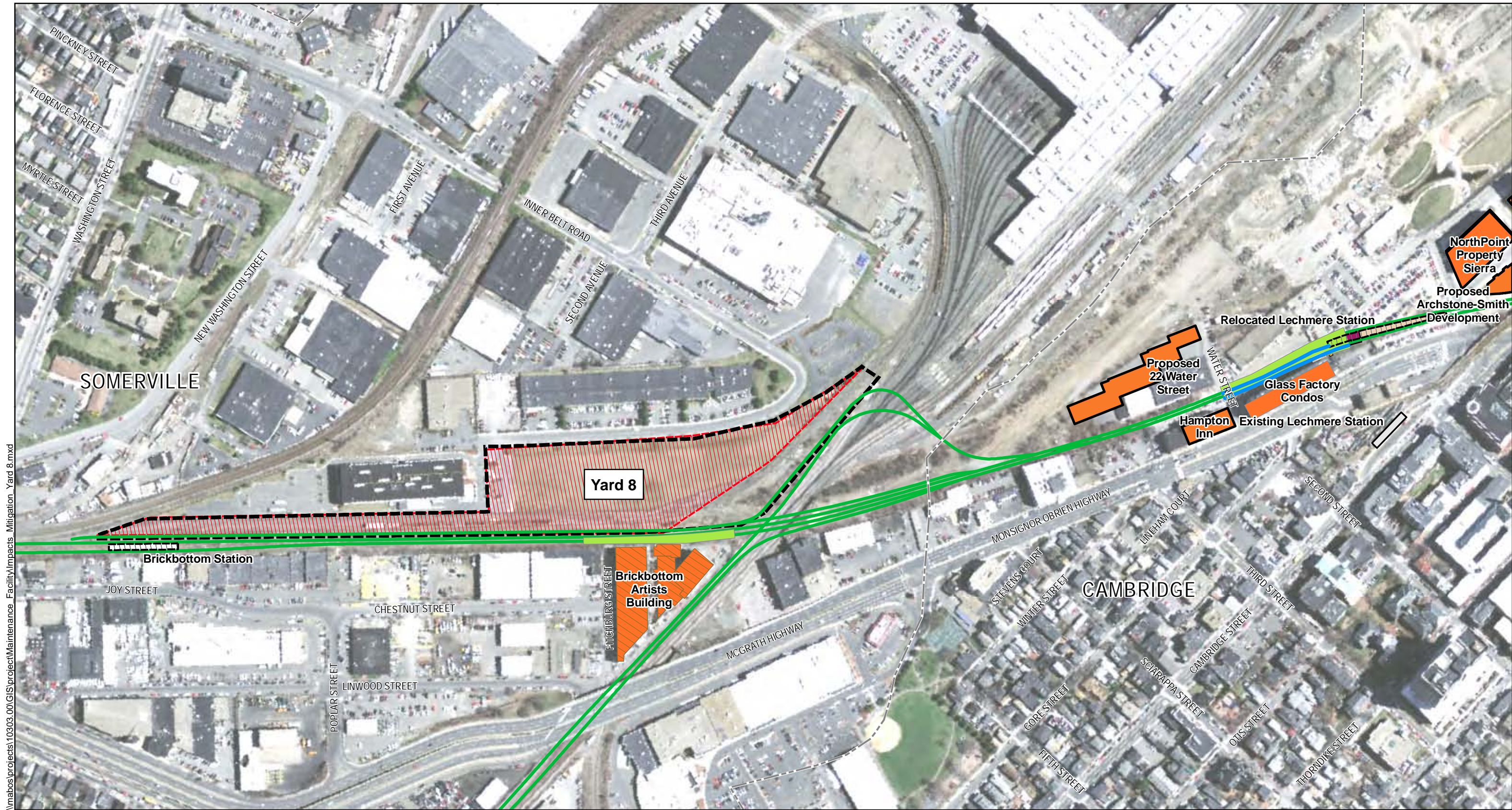


Green Line Extension Project

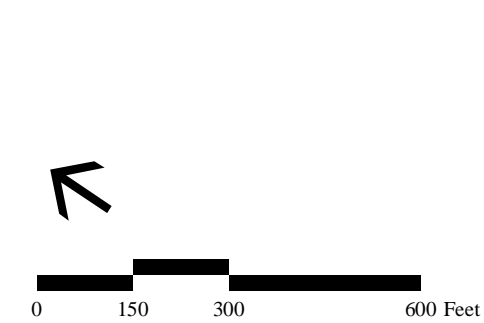
Figure 2-7

Environmental Setting - Mirror H Maintenance Facility

Sources: MassGIS



\\nabos\projects\10303.00\GIS\project\Maintenance_Facility\Impacts_Mitigation_Yard 8.mxd



Legend

- Proposed Green Line Extension
- Alternative Site
- Property Acquisitions for Maintenance Facility
- Station Platform**
- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact
- Impact not Requiring Mitigation for Interior Spaces
- Proposed Noise Barrier on Elevated Guideway

Vibration Mitigation

- Green Line Mitigation
- Buildings Impacted by Vibration
- Station Building
- Platform

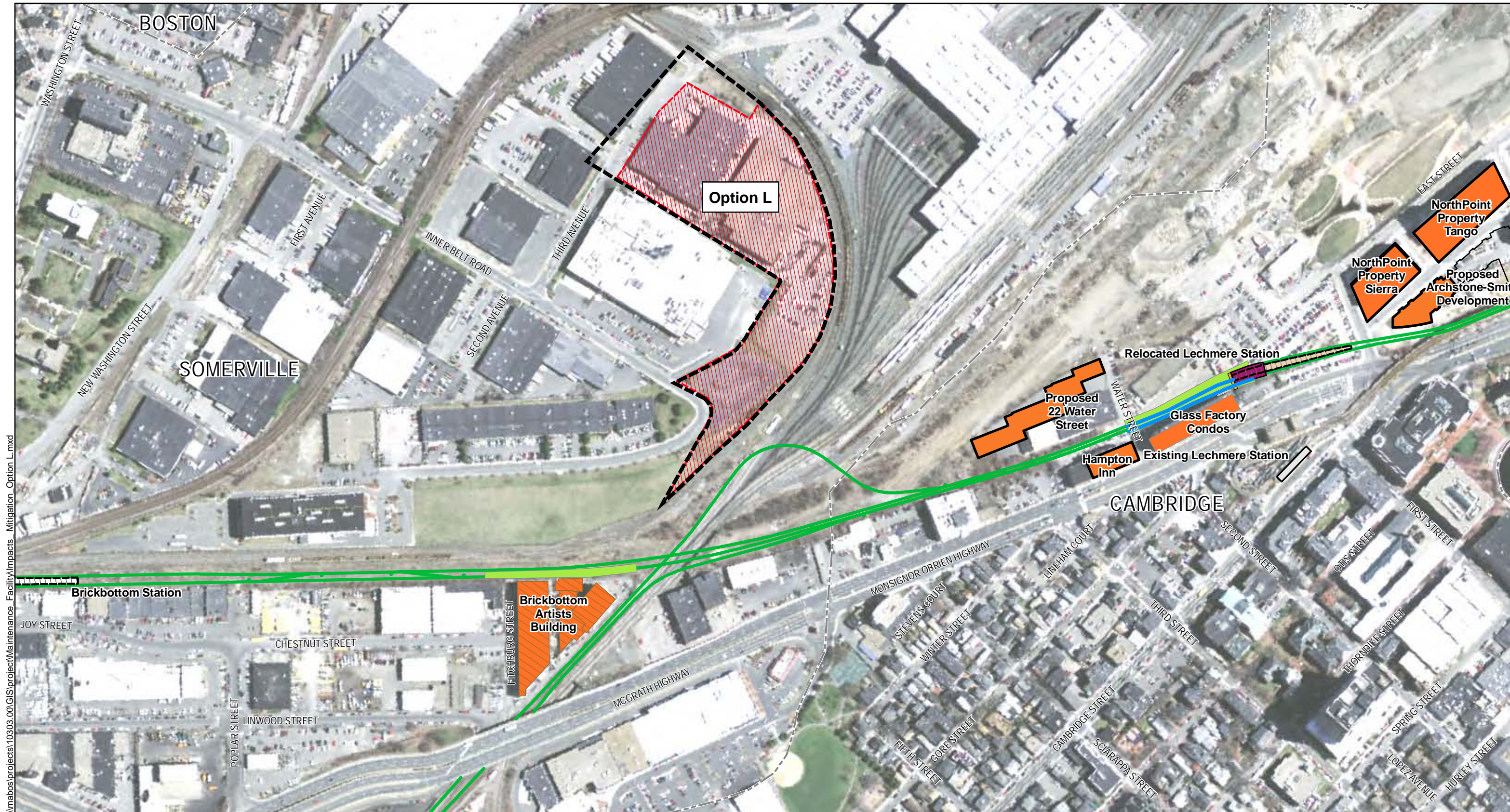


Green Line Extension Project

Figure 2-8

Proposed Project Impacts and Mitigation with Yard 8 Maintenance Facility

Sources: MassGIS



\\nabos\projects\10303.00\GIS\project\Maintenance_Facility\Impacts_Mitigation_Option L.mxd

Legend

- Proposed Green Line Extension
- Alternative Site
- Property Acquisitions for Maintenance Facility
- Station Platform**
- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact
- Impact not Requiring Mitigation for Interior Spaces
- Proposed Noise Barrier on Elevated Guideway

Vibration Mitigation

- Green Line Mitigation
- Buildings Impacted by Vibration
- Station Building
- Platform



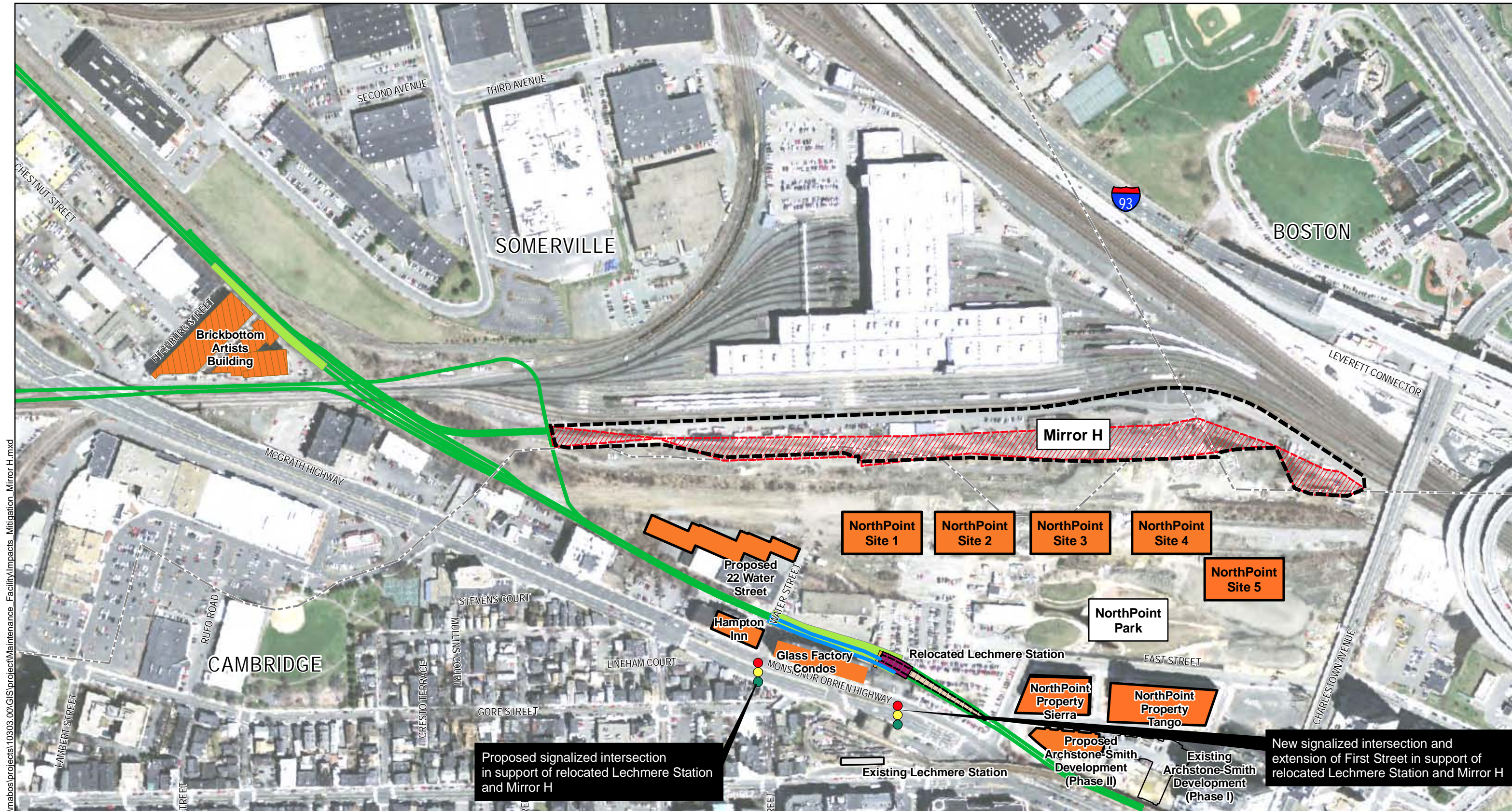
Green Line Extension Project

Figure 2-9

Proposed Project Impacts and Mitigation with Option L Maintenance Facility

Sources: MassGIS





\\nabos\projects\10303.00\GIS\project\Maintenance_Facility\Impacts_Mitigation_Mirror H.mxd

Legend

- Proposed Green Line Extension
- Alternative Site
- Property Acquisitions for Maintenance Facility
- Station Platform**
- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact
- Impact not Requiring Mitigation for Interior Spaces
- Proposed Noise Barrier on Elevated Guideway

Vibration Mitigation

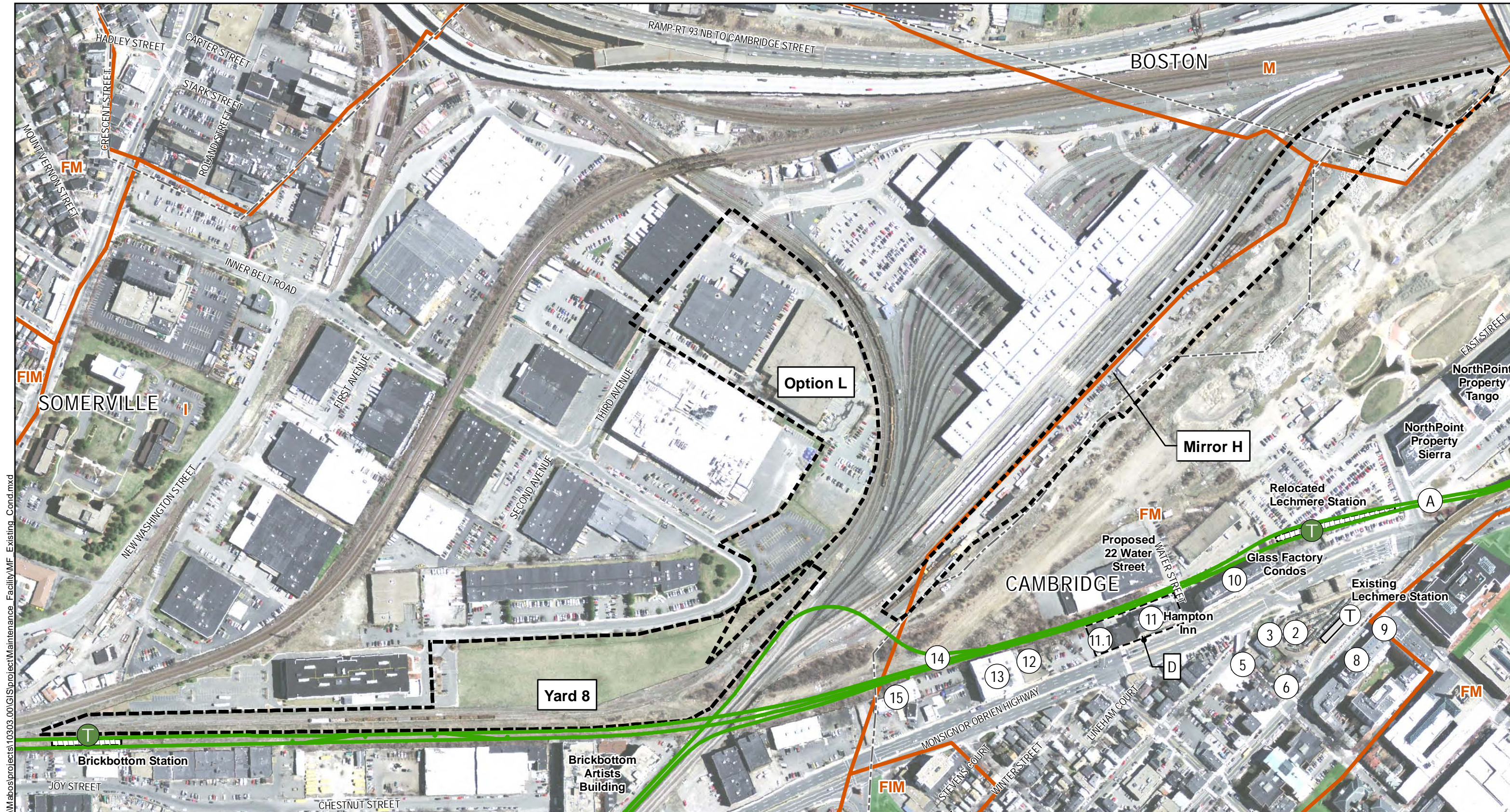
- Green Line Mitigation
- Buildings Impacted by Vibration
- Station Building
- Platform
- ● ● Signal



Green Line Extension Project

Figure 2-10
Proposed Project Impacts and Mitigation with Mirror H Maintenance Facility

Sources: MassGIS



\\mabos\projects\10303.00\GIS\project\Maintenance_Facility\MF_Existing_Cond.mxd

Legend

- | | | |
|-----------------------|---------------------------------------|---|
| Proposed Station | Proposed Green Line Extension | Environmental Justice Populations - with Flag |
| Existing MBTA Station | Alternative Site | F Meets the EJ criteria foreign-born percentage |
| Fire Stations | Protected and Recreational Open Space | I Meets the EJ criteria for income |
| Police Stations | | M Meets the EJ criteria for minority percentage |
| | | E Meets the EJ criteria for English proficiency percentage |
| | | Historic Buildings |
| | | Historic District |



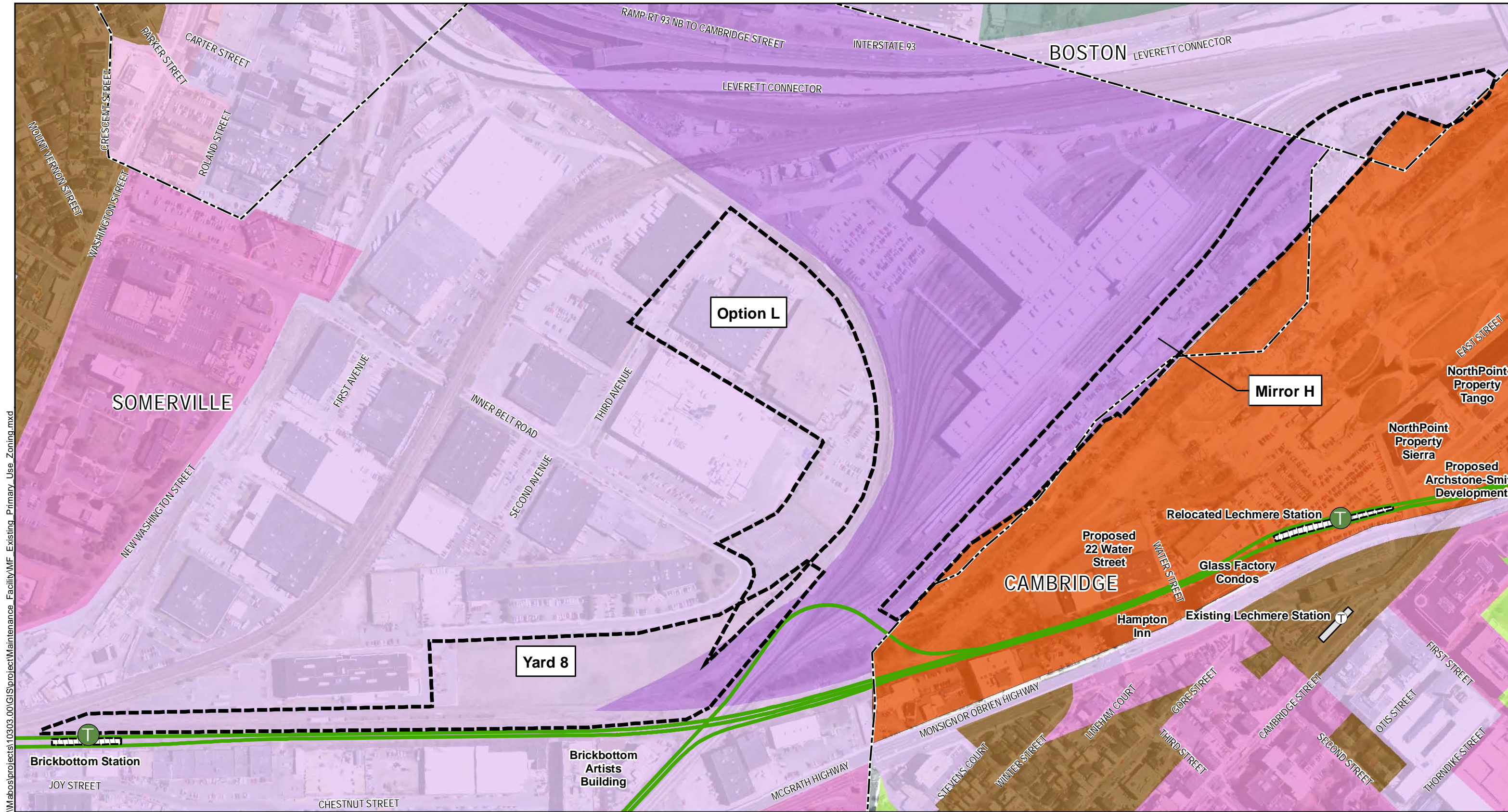
Green Line Extension Project

Figure 2-11

Maintenance Facility Alternatives
Existing Conditions - Environmental Justice
and Historic Resources



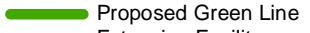
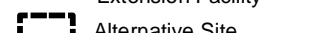
Sources: MassGIS













\\mabos\projects\10303.00\GIS\project\Maintenance_Facility\MF_Existing_Primary_Use_Zoning.mxd

Legend

-  Proposed Station
-  Existing MBTA Station
-  Proposed Green Line Extension Facility
-  Alternative Site

Zoning by Primary Use

-  Conservation/Passive Recreation
-  General Business
-  Limited, Central, Hwy Business; Office Park
-  General Industrial
-  Light Industrial
-  Institutional; Health Care
-  Multi-family Medium High-density Residential
-  North Point Residence, Office and Business District

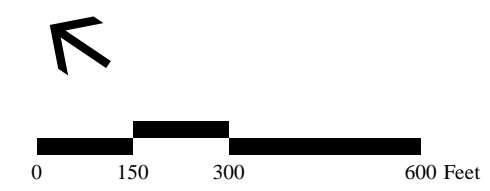


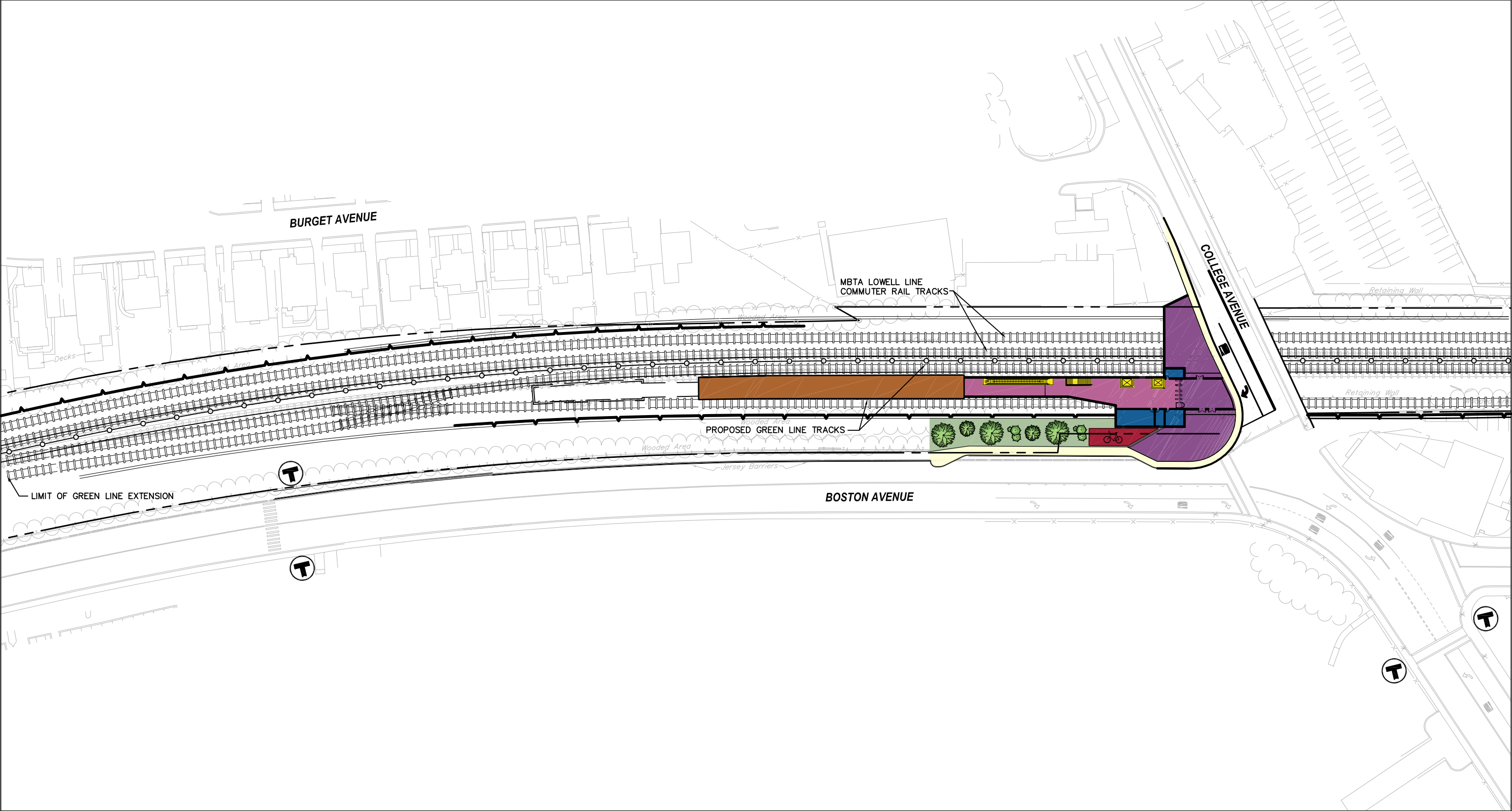
Green Line Extension Project

Figure 2-12

Maintenance Facility Alternatives
Primary Use Zoning

Sources: MassGIS



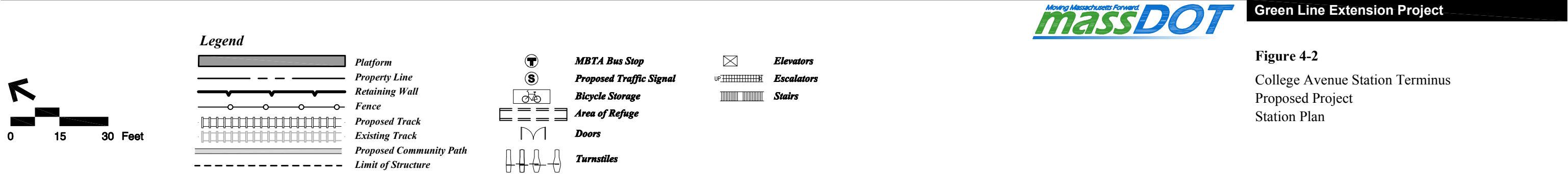
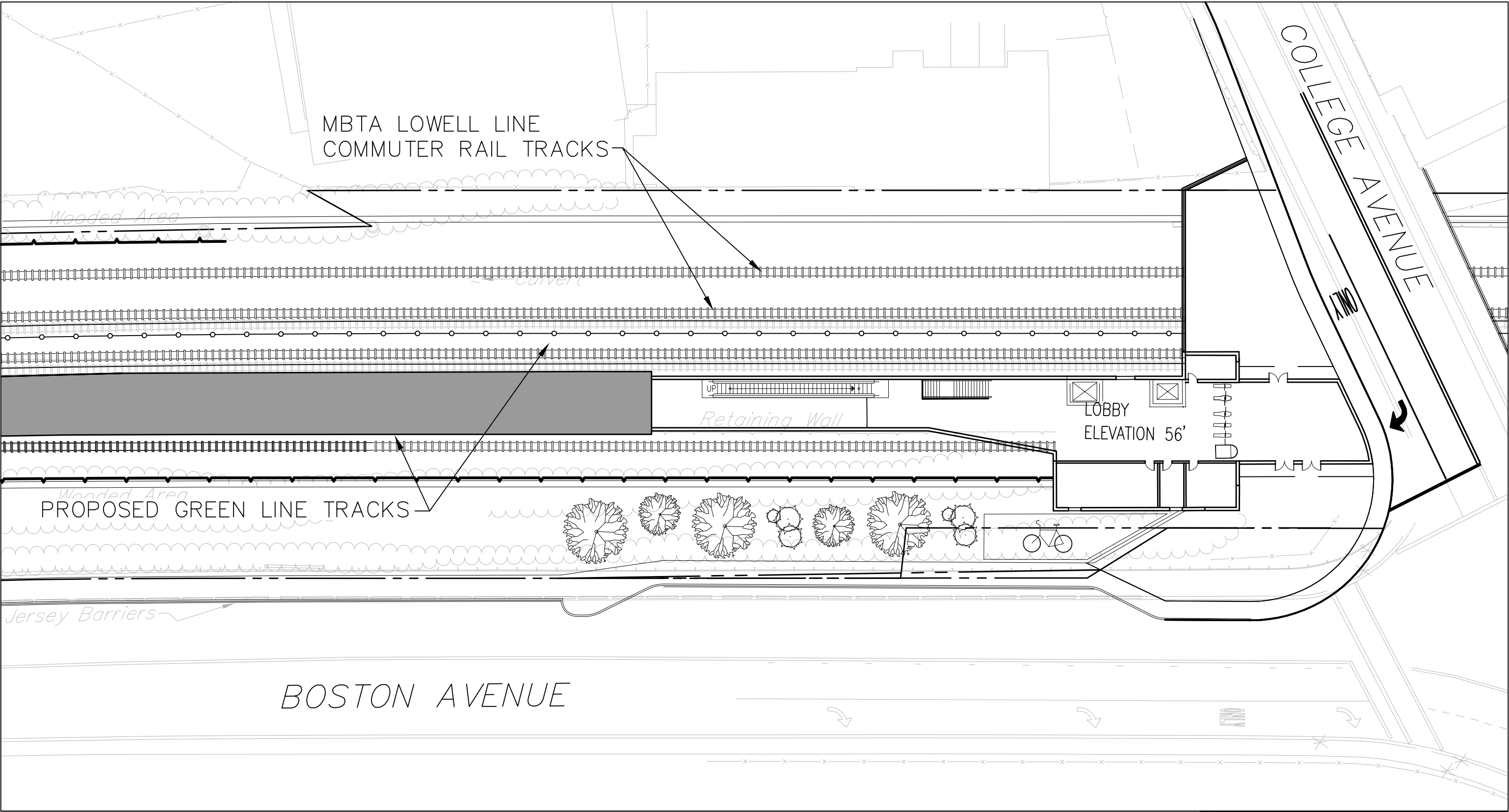


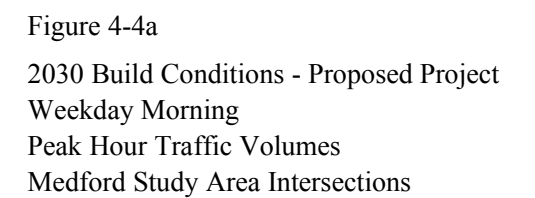
Legend

	Property Line		Platform		MBTA Bus Stop
	Retaining Wall		Station Concourse		Proposed Traffic Signal
	Fence		Station Entry		New Sidewalk
	Proposed Track		Service Areas		New Landscaping
	Existing Track		Elevators		New Pavement
	Limit of Structure		Escalators		Proposed Community Path
	Area of Refuge		Stairs		
	Doors		Bicycle Storage		
	Turnstiles				

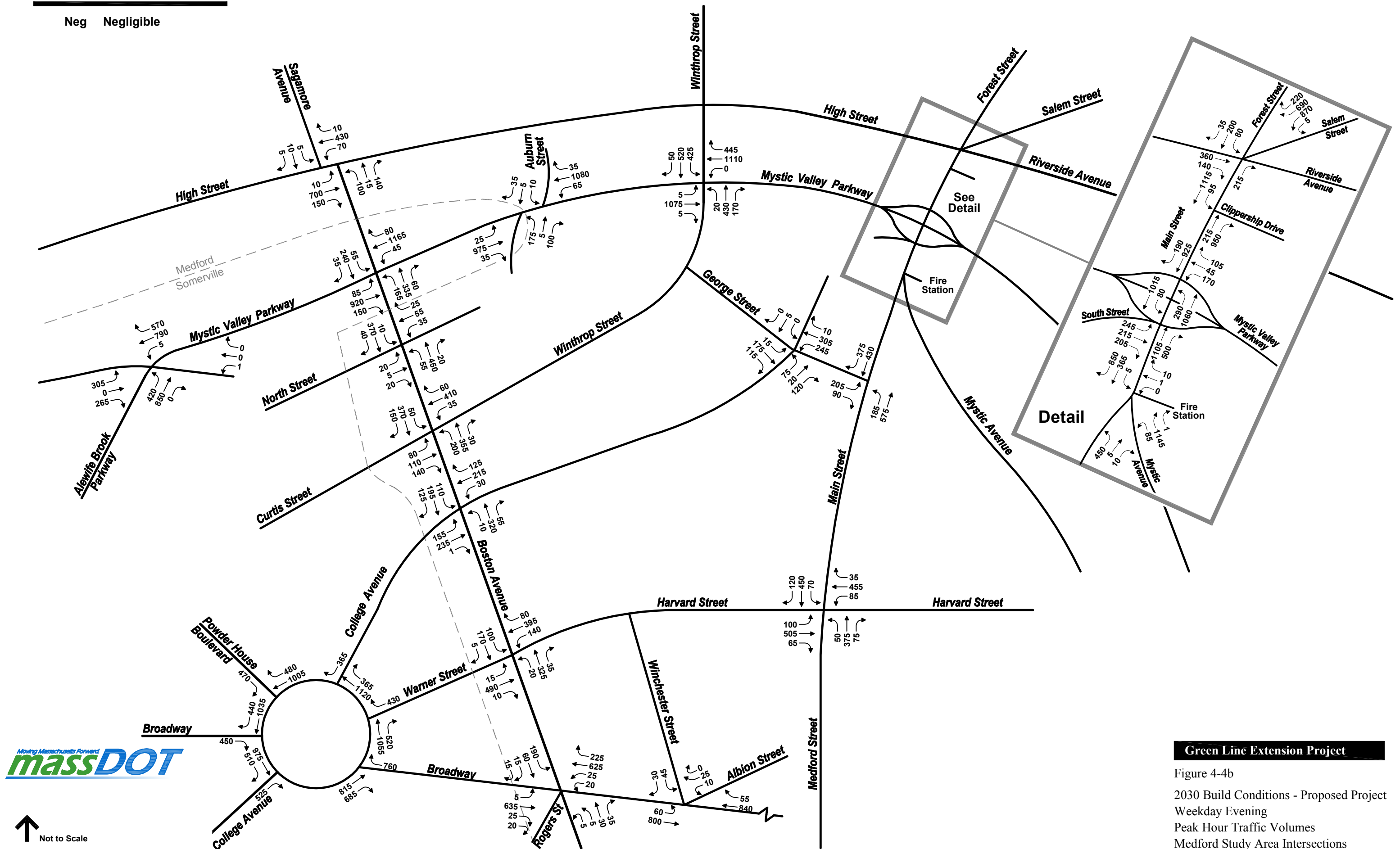
Green Line Extension Project

Figure 4-1
College Avenue Station Terminus
Proposed Project
Station Layout





Neg Negligible

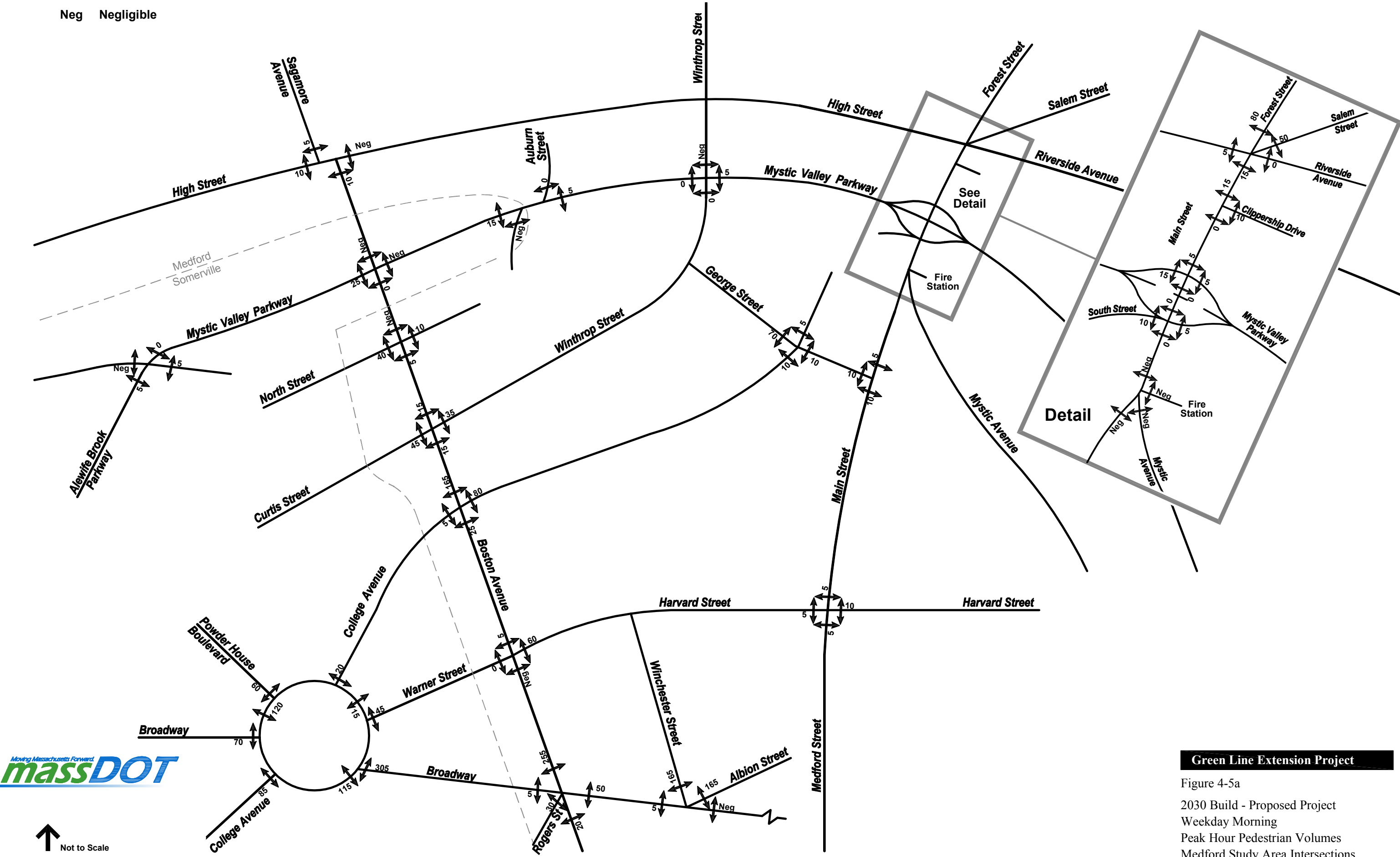


Green Line Extension Project

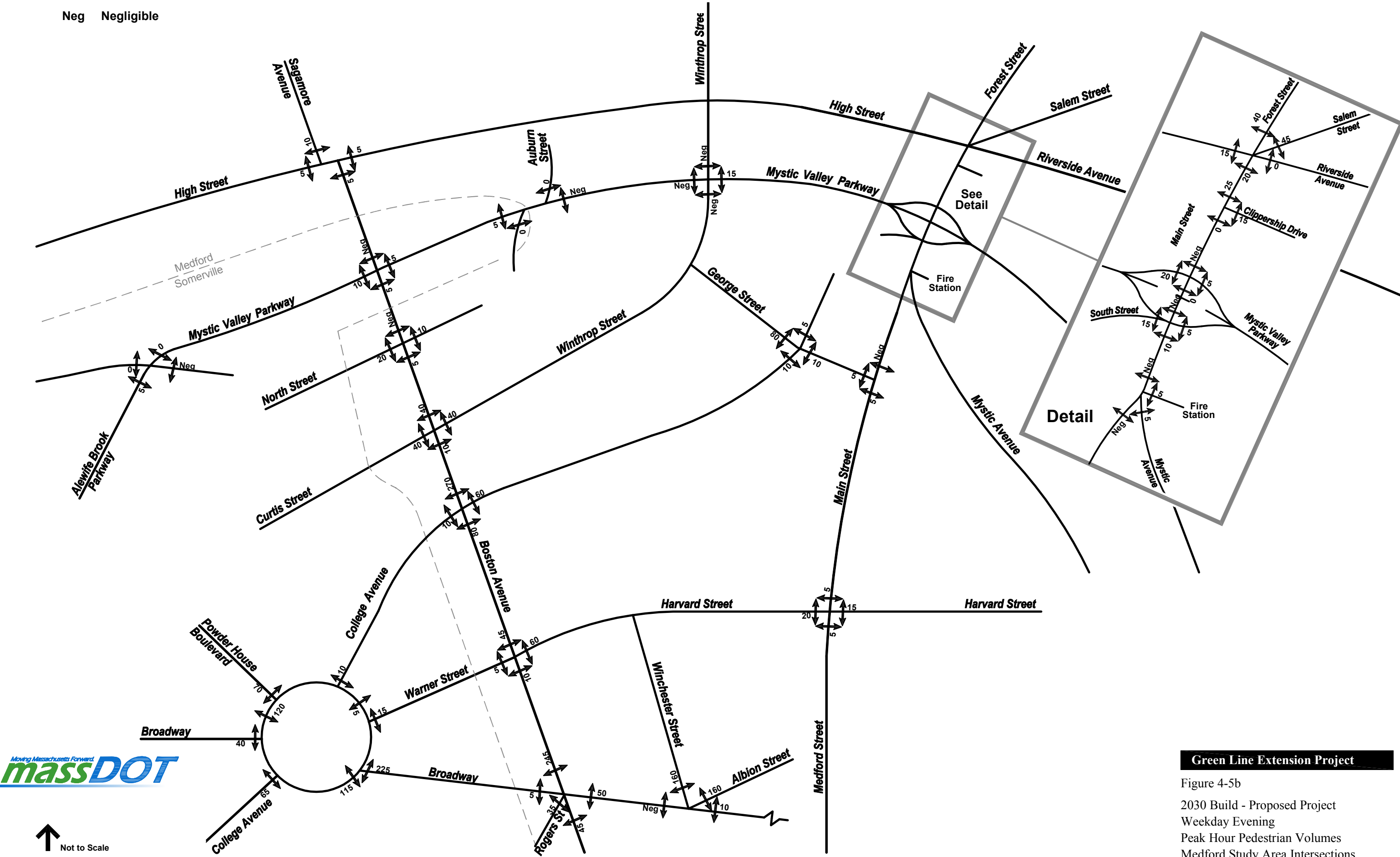
Figure 4-4b

2030 Build Conditions - Proposed Project
Weekday Evening
Peak Hour Traffic Volumes
Medford Study Area Intersections

Neg Negligible



Neg Negligible





File Source: \\Mabos\projects\10303.00\GIS\project\Noise_Vibration\Fig4-6_Noise_Mitigation.mxd

Legend

 Project Area

Station Platform

 Proposed

 Existing

Buildings Impacted by Noise Prior to Mitigation

 Moderate Impact

 Severe Impact

16 Noise Barrier Location

 Noise Barrier

Moving Massachusetts Forward.

massDOT

Green Line Extension Project

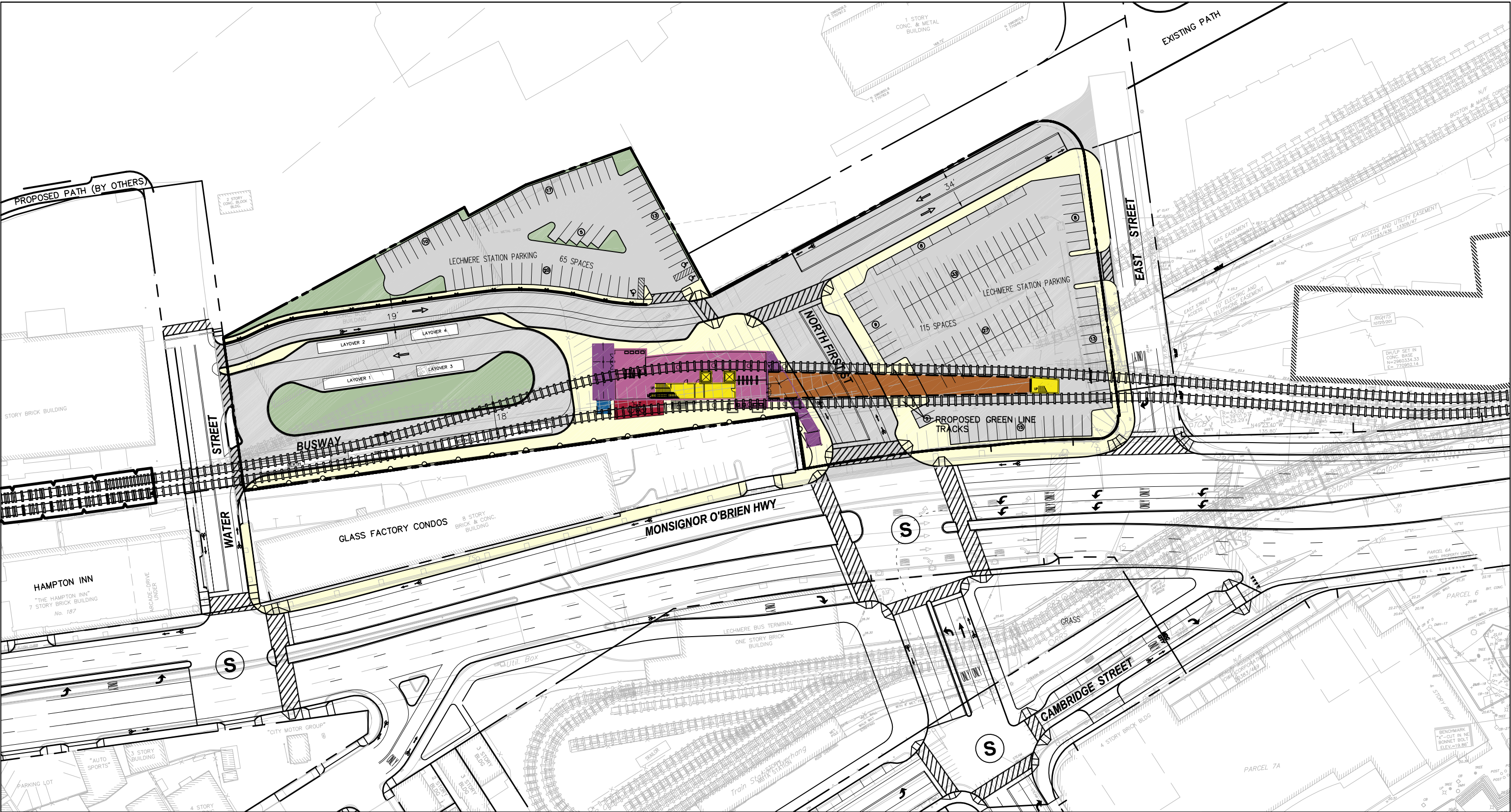
Figure 4-6

College Avenue Station Terminus
Noise Impacts and Mitigation Measures

0 100 200 400 Feet

Sources: Harris Miller Miller & Hanson Inc.





04080 Feet

Legend

Property Line

Retaining Wall

Fence

Proposed Track

Existing Track

Limit of Structure

Area of Refuge

Doors

Turnstiles

Platform

Station Concourse

Station Entry

Service Areas

Elevators

Escalators

Stairs

Bicycle Storage

Proposed Traffic Signal

New Sidewalk

New Landscaping

New Pavement

Proposed Community Path

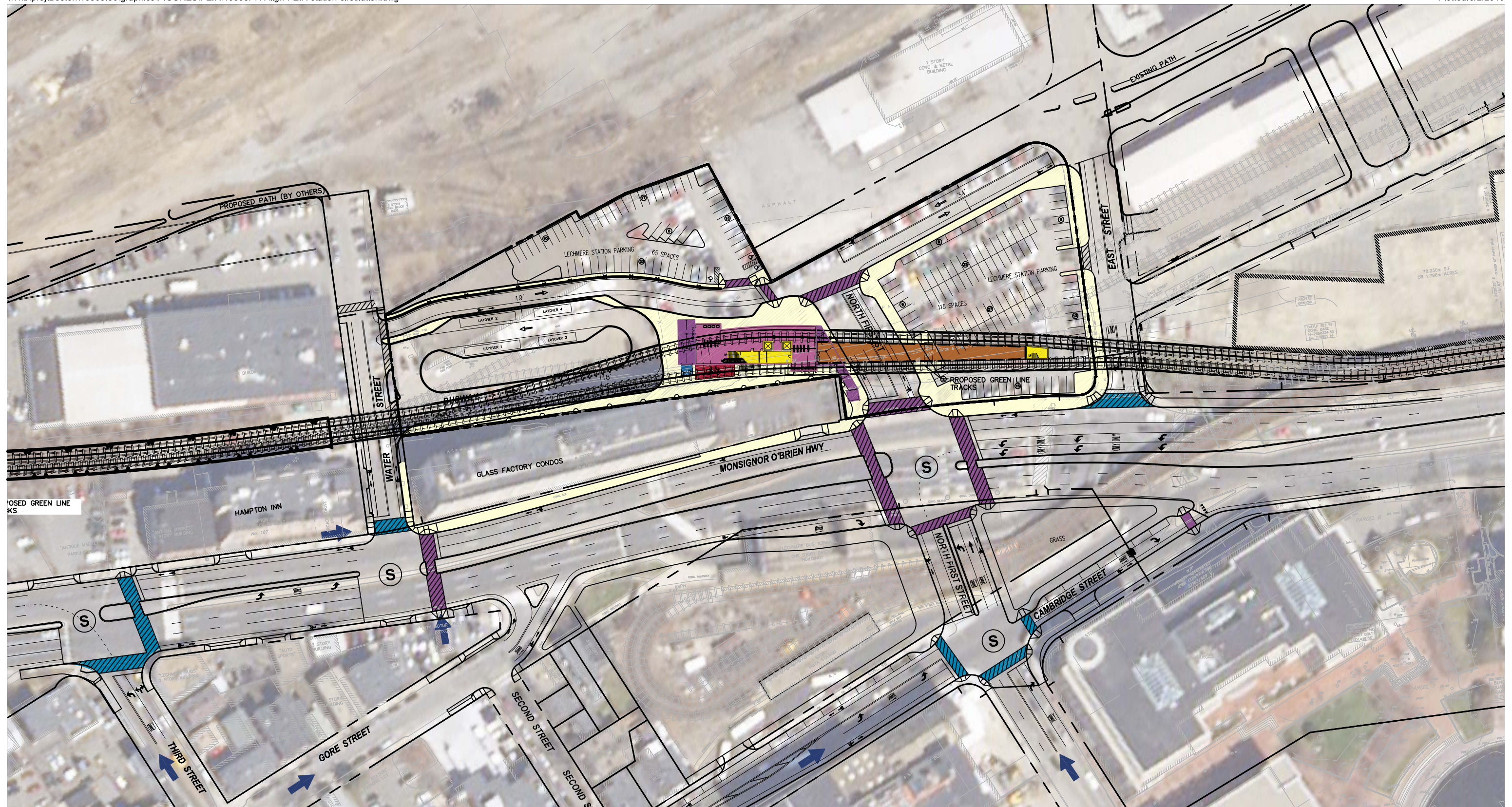
Moving Massachusetts Forward.

Green Line Extension Project

Figure 5-1

Relocated Lechmere Station

Revised Station Layout



Legend



MBTA Bus Stop



Proposed Traffic Signal



Bicycle Storage



Existing Crosswalks



Proposed Crosswalk



Pick-Up/Drop-Off Area



Pedestrian/Bicycle Access



Platform



Station Concourse



Station Entry



Service Areas



Stairs, Elevators, Escalators



New Sidewalk



New Landscaping

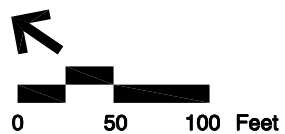


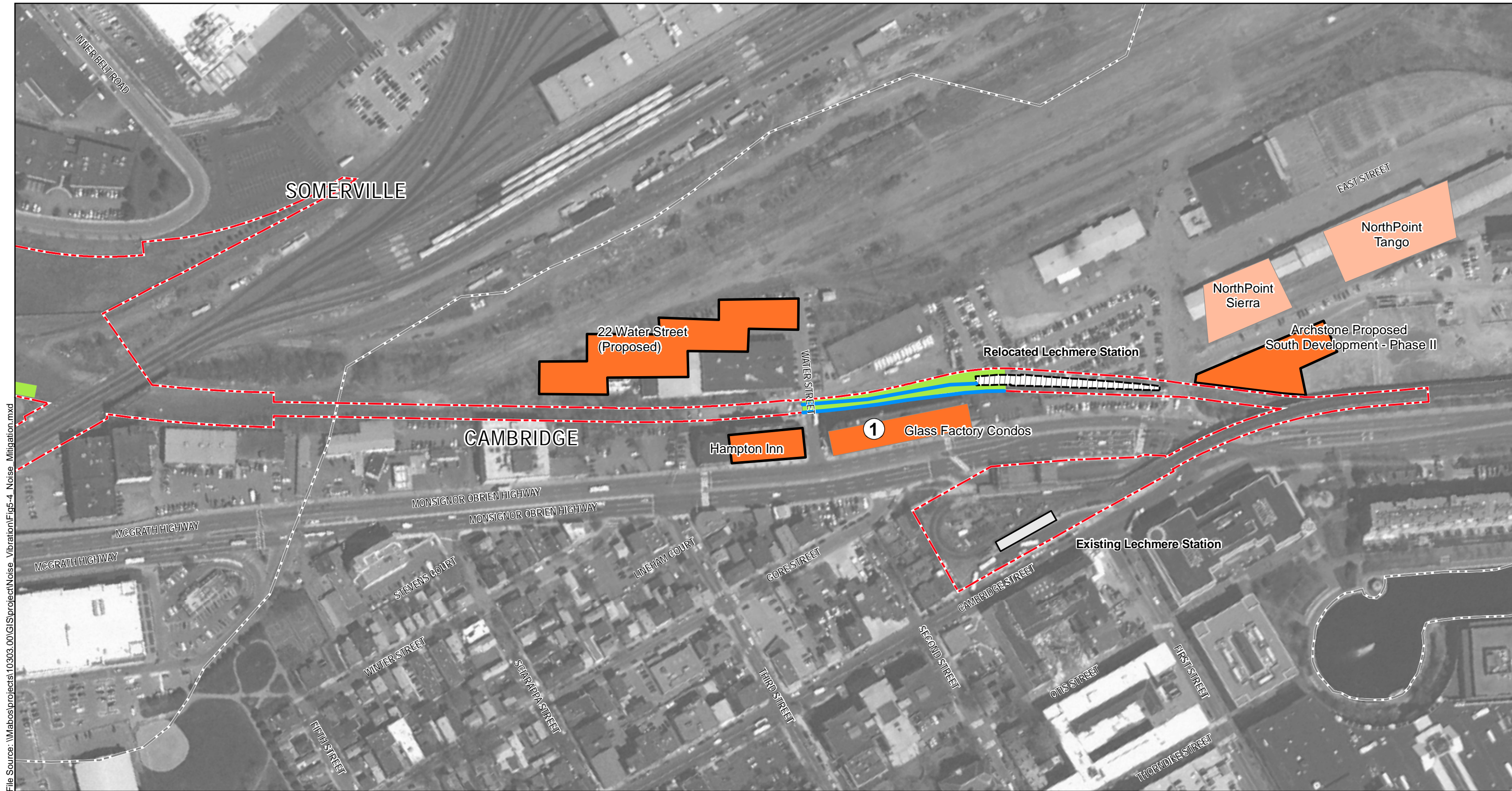
Proposed Community Path

Moving Massachusetts Forward.
massDOT

Green Line Extension Project

Figure 5-3
Relocated Lechmere Station
Circulation





File Source: \\Mabos\projects\10303.00\GIS\project\Noise_Vibration\Fig5-4 Noise_Mitigation.mxd

Legend

- Project Area
- Station Platform**
- Proposed
- Existing

Buildings Impacted by Noise Prior to Mitigation

- Moderate Impact
- Severe Impact
- Impact Not Requiring Mitigation for Interior Spaces

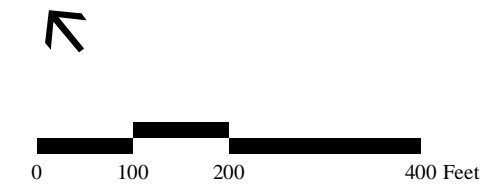
Proposed Noise Mitigation

- Proposed Noise Barrier on Elevated Guideway
- Proposed Track Vibration Isolation for Noise
- 1 Noise and Vibration Mitigation Location

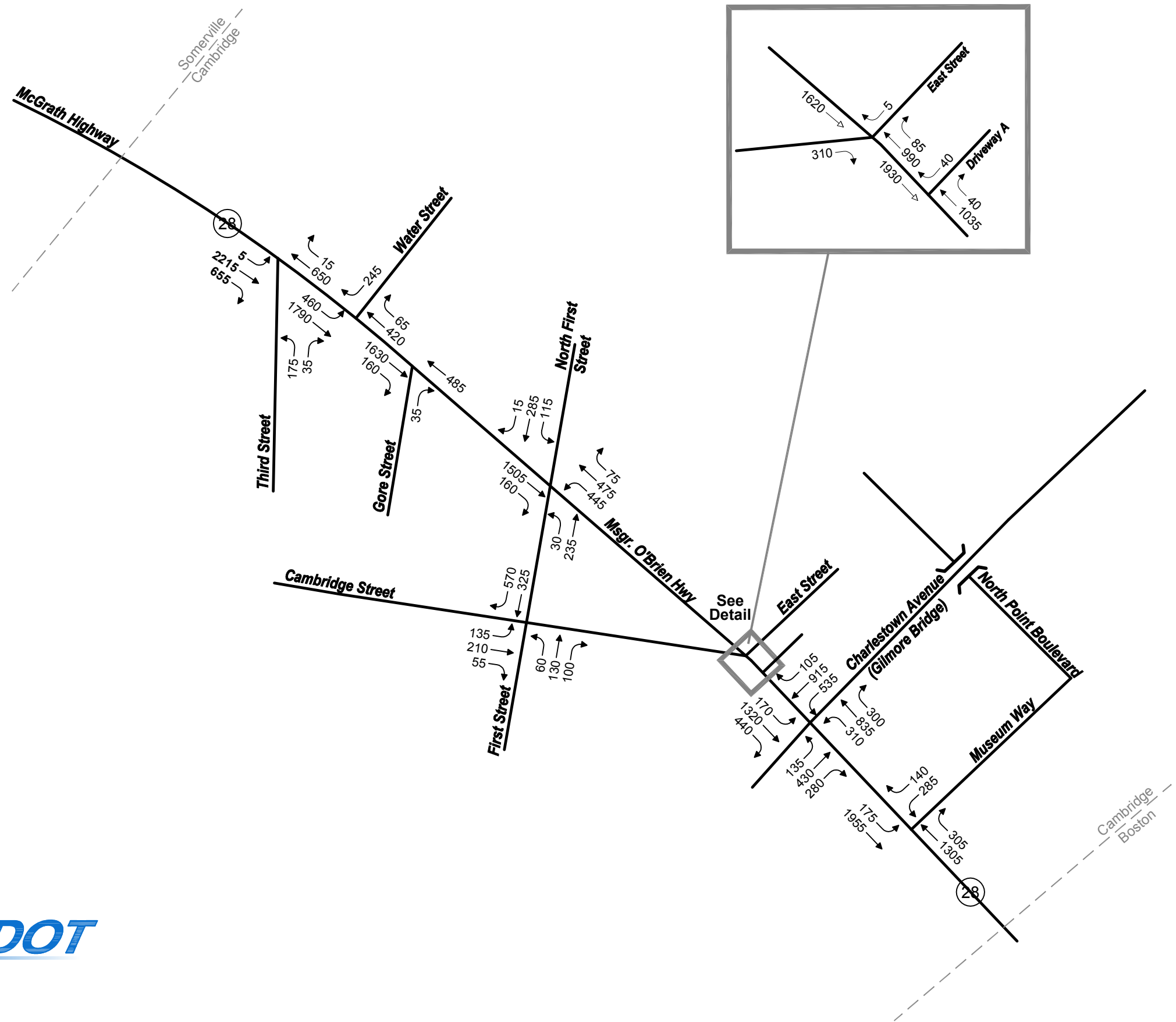


Green Line Extension Project

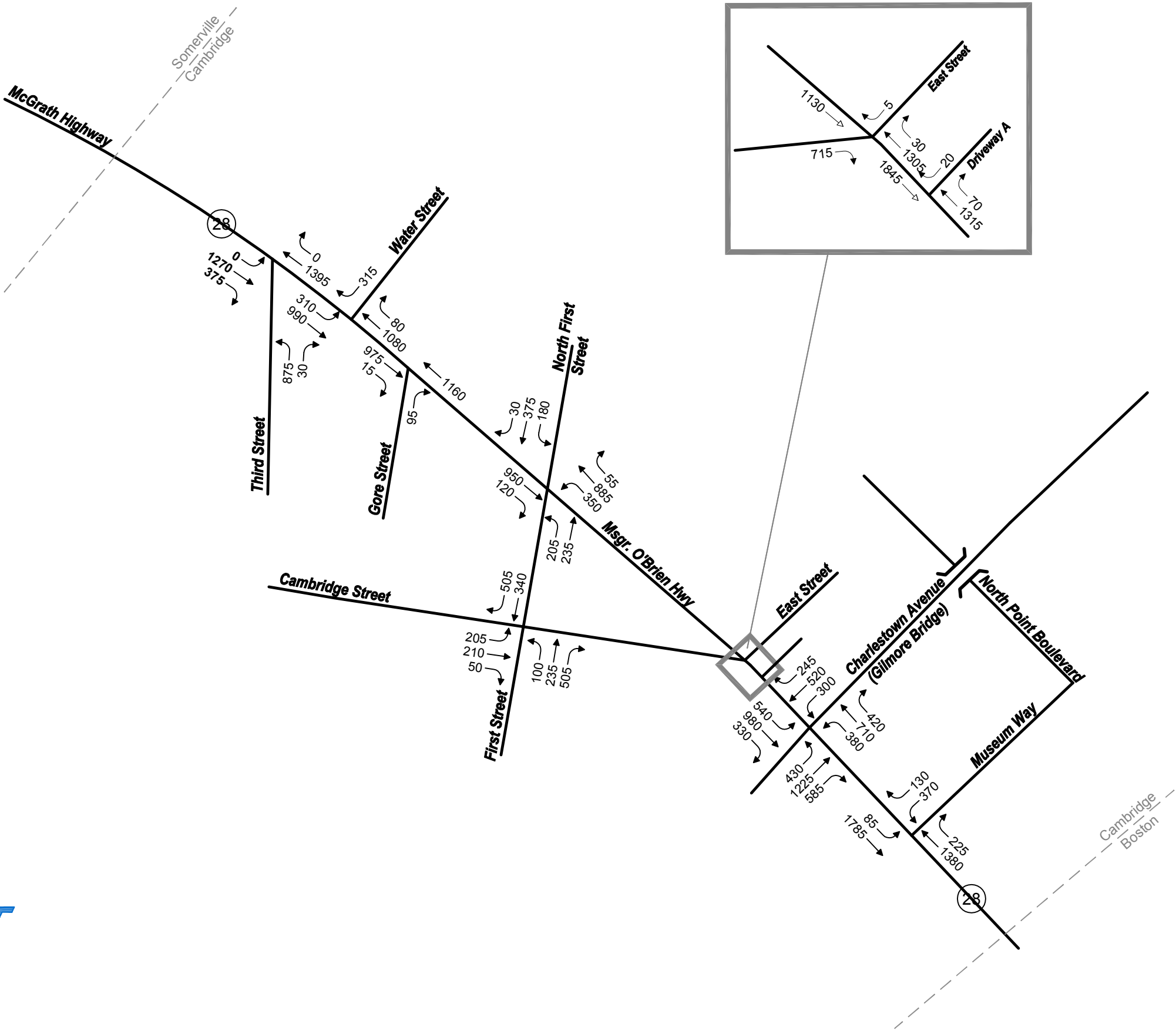
Figure 5-4
Relocated Lechmere Station
Noise Impacts and Mitigation Measures



Negligible



Neg Negligible

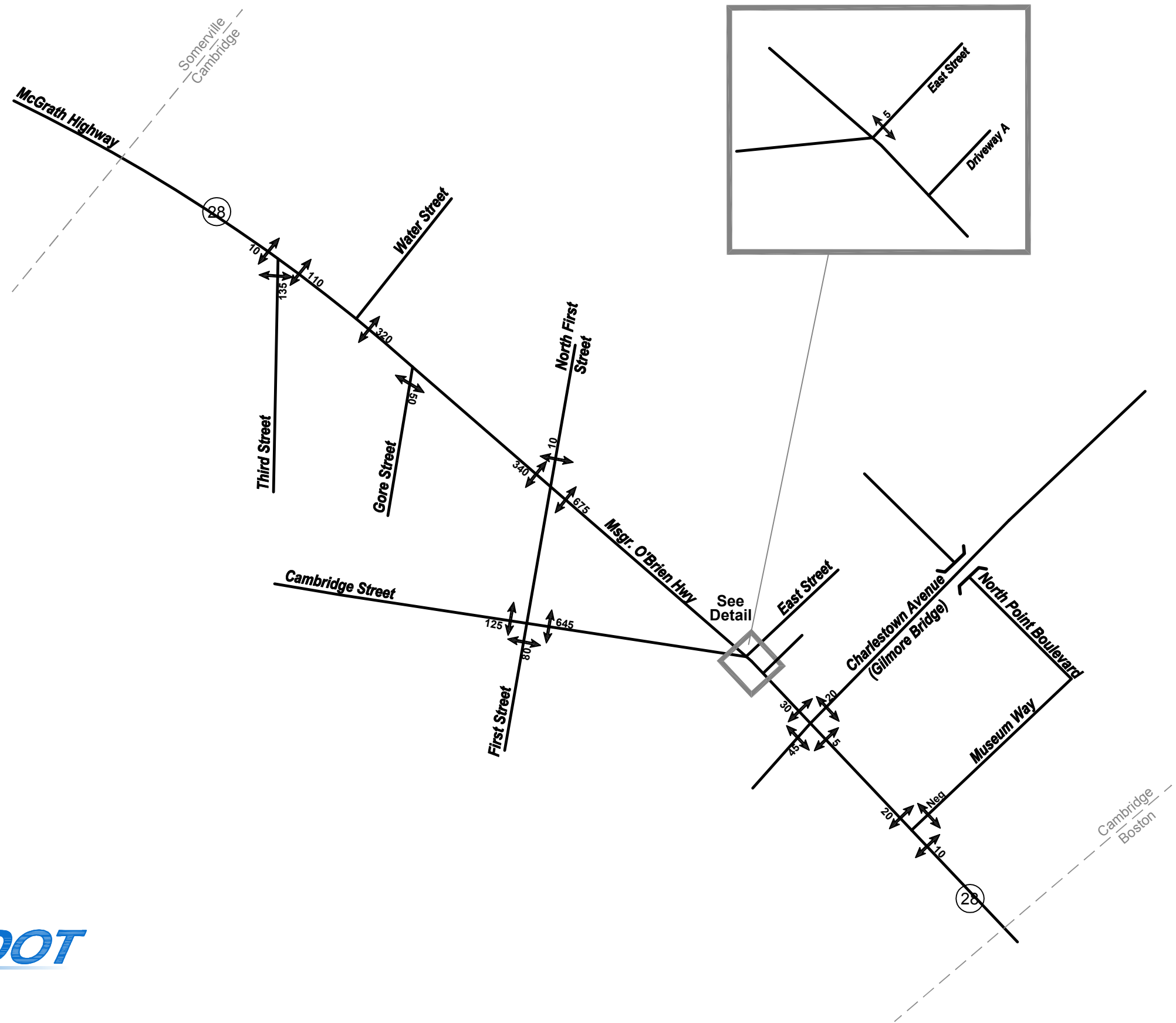


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Not to Scale

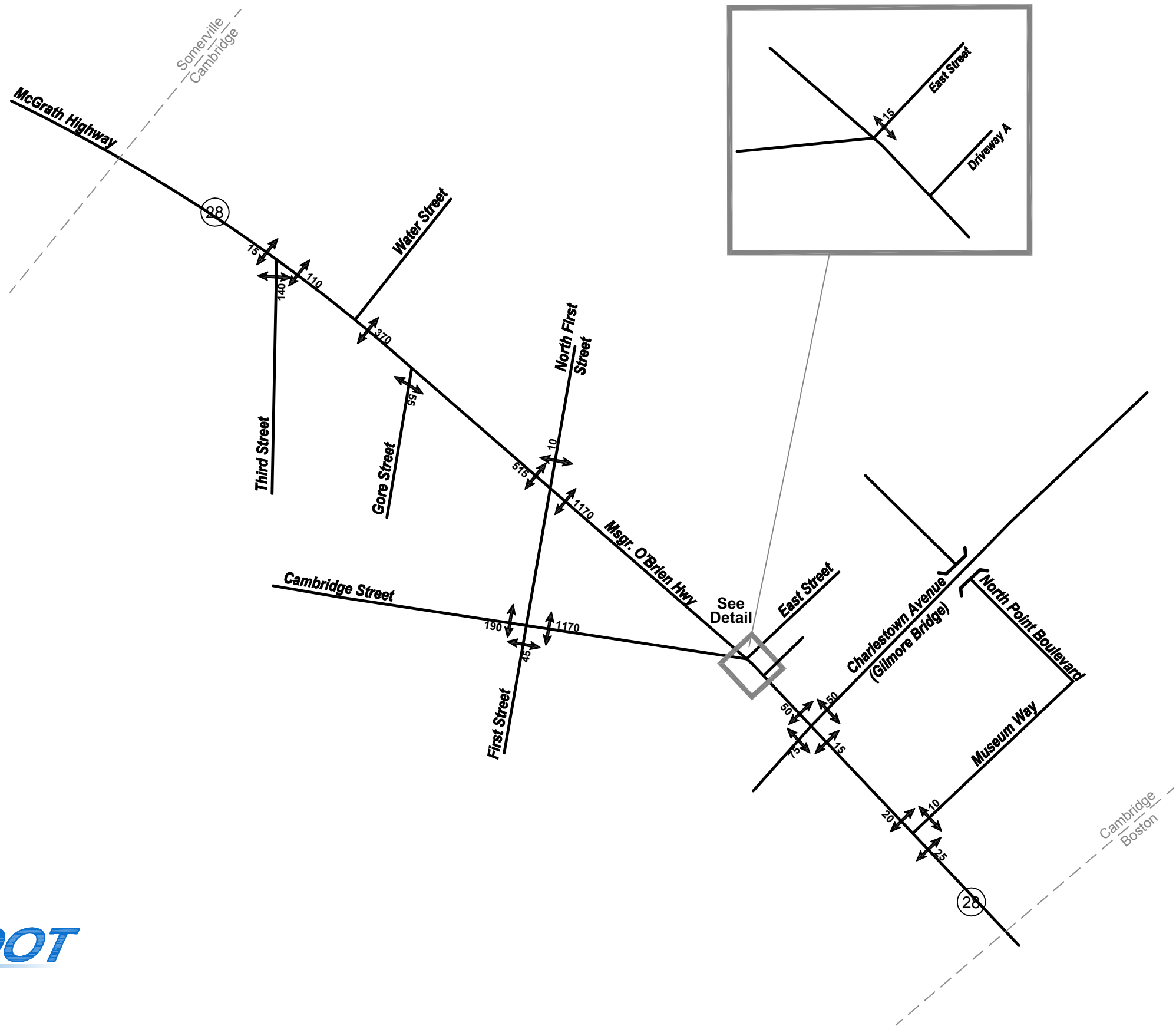
Green Line Extension Project

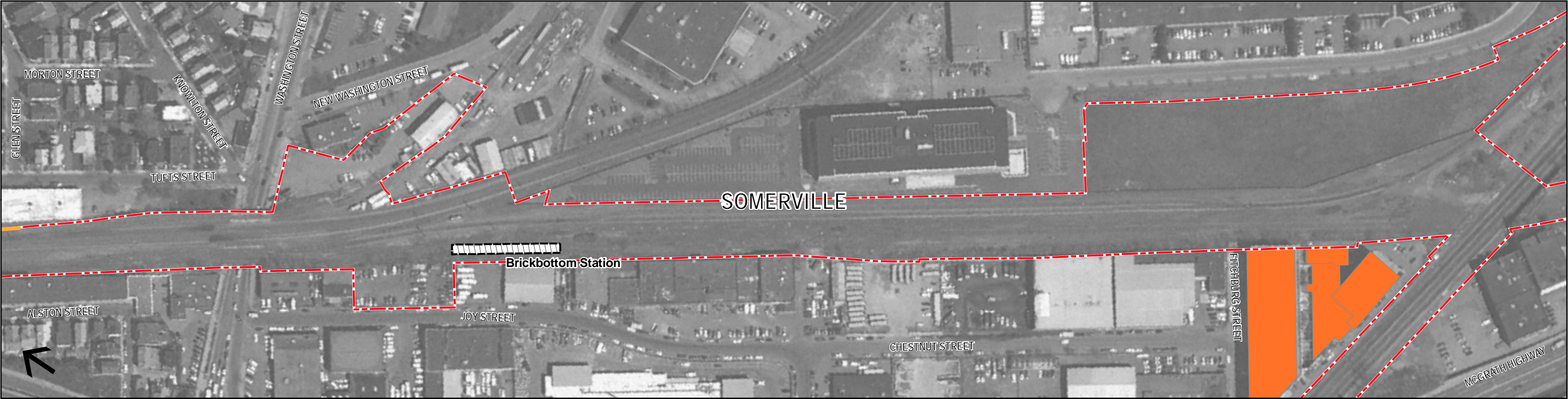
Figure 5-5b
2030 Build Conditions - Proposed Project
Weekday Evening
Peak Hour Traffic Volumes
Cambridge Study Area Intersections

Negligible



Negligible





Legend

- Project Area
- Proposed
- Existing

Buildings Impacted by Noise Prior to Mitigation

- Moderate Impact
- Severe Impact

Proposed Noise Mitigation

- Proposed Noise Barrier on Elevated Guideway
- Proposed Track Vibration Isolation for Noise
- 1 Noise and Vibration Mitigation Location

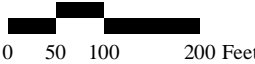


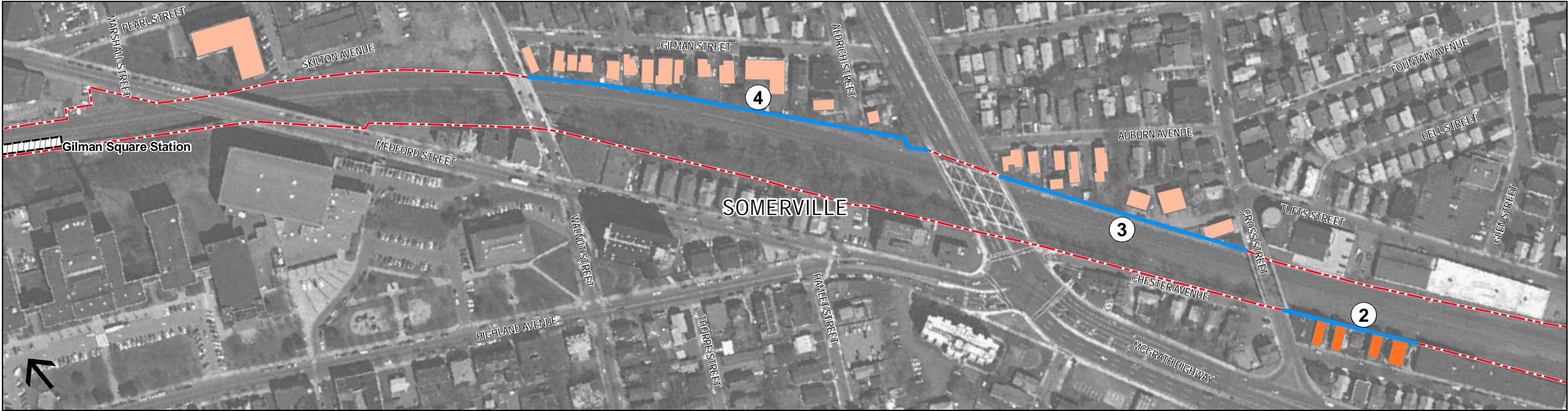
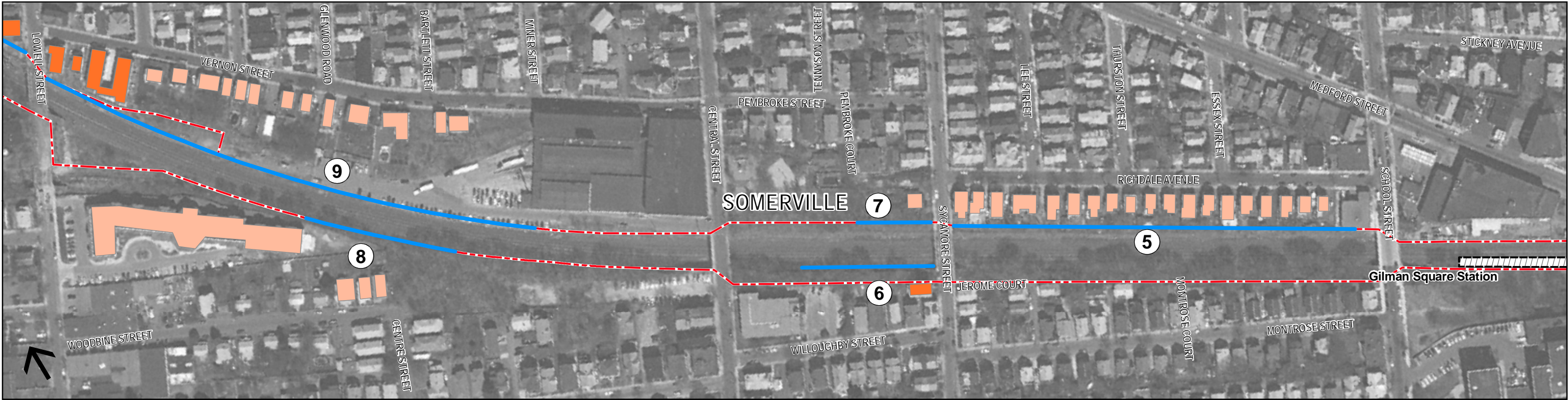
Green Line Extension Project

Figure 7-1

Noise Impacts and Mitigation Measures

Sheet 1 of 5





Legend

- Project Area
- Station Platform**
- Proposed
- Existing

- Buildings Impacted by Noise Without Mitigation**
- Moderate Impact
- Severe Impact

- Proposed Noise Barriers**
- Proposed Project



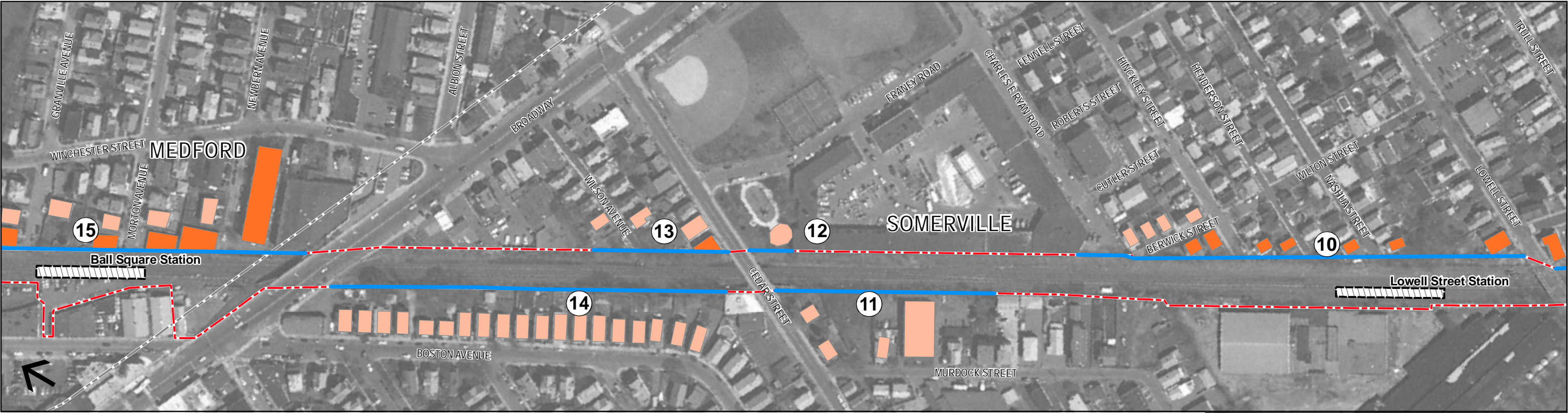
Green Line Extension Project

Figure 7-2

Noise Impacts and Mitigation Measures

Sheet 2 of 5





Legend

- Project Area
- Station Platform**
- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact

Proposed Noise Barriers

- Proposed Project

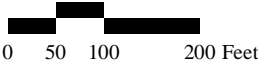


Green Line Extension Project

Figure 7-3

Noise Impacts and Mitigation Measures

Sheet 3 of 5





Legend

- Project Area
- Station Platform
- Proposed
- Existing

Buildings Impacted by Noise Without Mitigation

- Moderate Impact
- Severe Impact

Proposed Noise Barriers

- Proposed Project

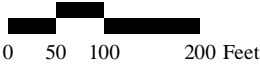


Green Line Extension Project

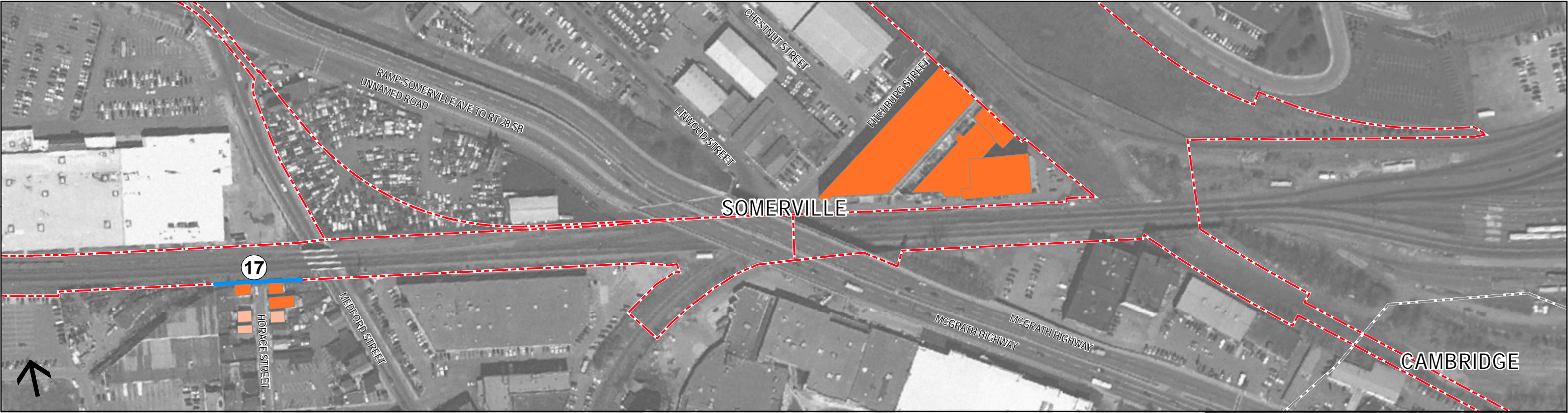
Figure 7-4

Noise Impacts and Mitigation Measures

Sheet 4 of 5



Sources: Harris Miller Miller & Hanson Inc.



Legend

- Project Area
- Station Platform
- Proposed
- Existing

- Buildings Impacted by Noise Without Mitigation**
- Moderate Impact
 - Severe Impact

- Proposed Noise Barriers**
- Proposed Project

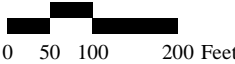


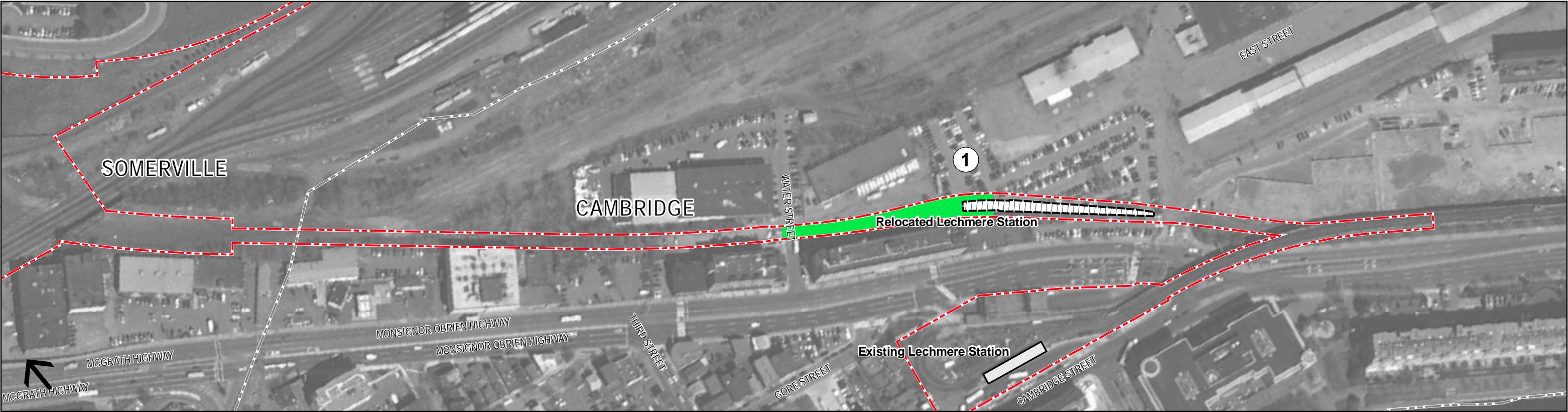
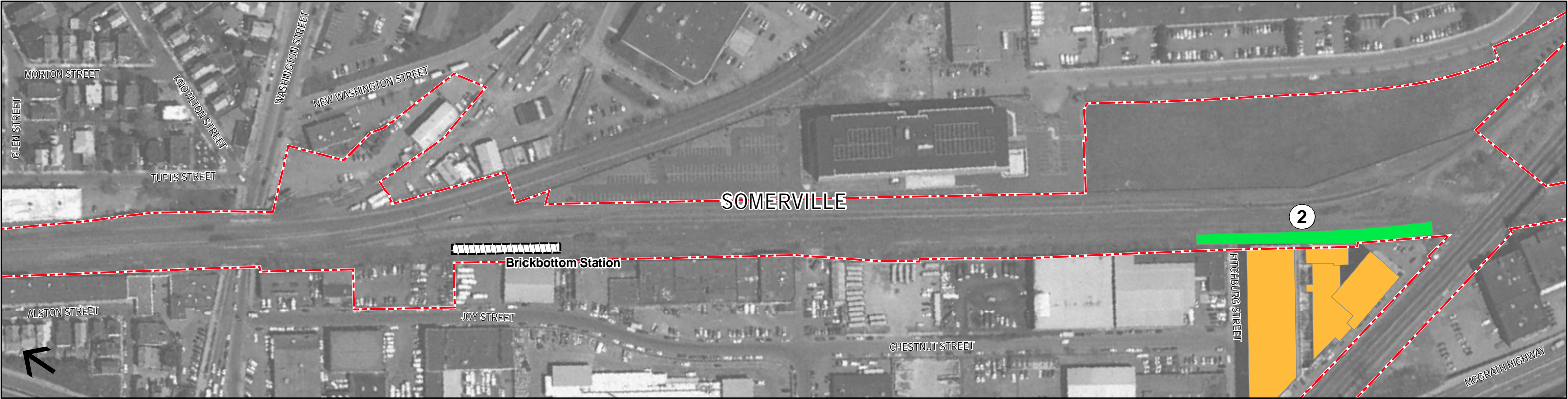
Green Line Extension Project

Figure 7-5

Noise Impacts and Mitigation Measures

Sheet 5 of 5





Legend

Project Area	Buildings Impacted by Vibration
Station Platform	Vibration Mitigation
Proposed	Commuter Rail Mitigation
Existing	Green Line Mitigation

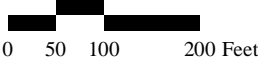


Green Line Extension Project

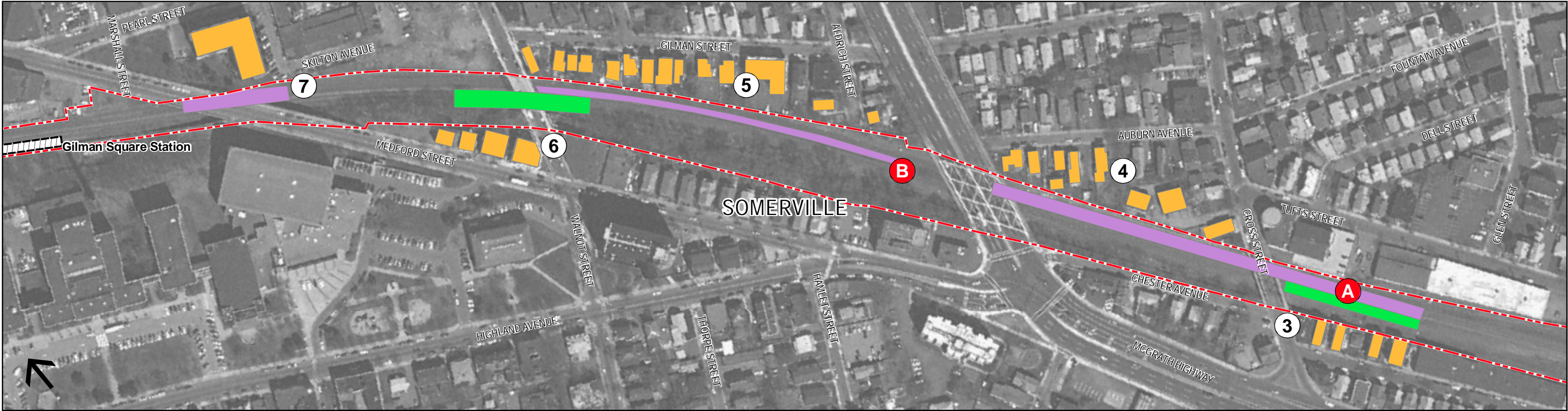
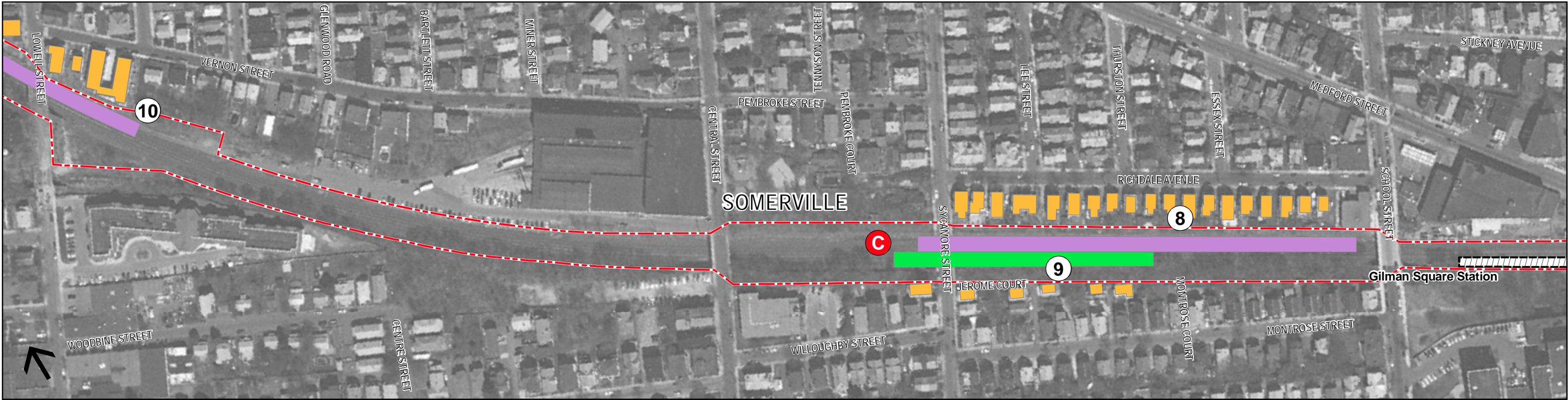
Figure 7-6

Vibration Impacts and Mitigation Measures

Sheet 1 of 5



Sources: Harris Miller Miller & Hanson Inc.



- Legend**
- Project Area
 - Buildings Impacted by Vibration
 - Station Platform**
 - Proposed
 - Commuter Rail Mitigation
 - Existing
 - Green Line Mitigation



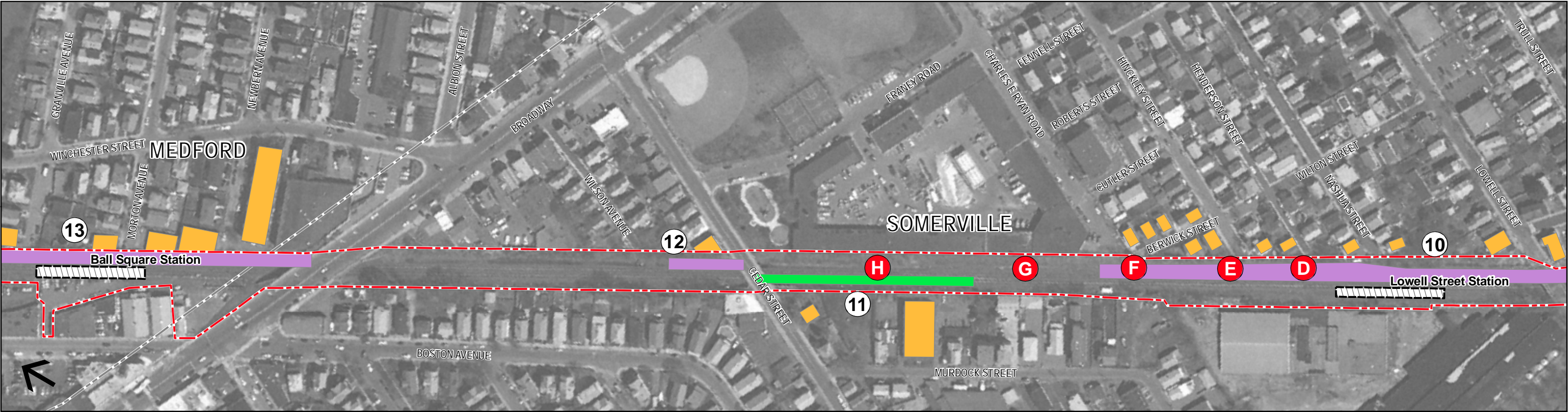
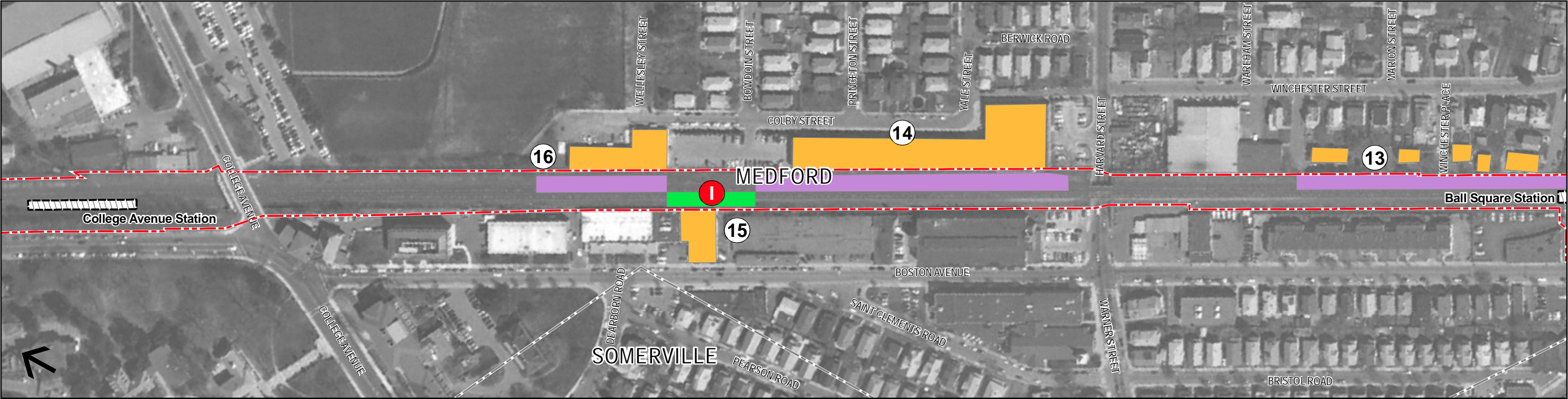
Green Line Extension Project

Figure 7-7

Vibration Impacts and Mitigation Measures

Sheet 2 of 5





Legend

Project Area

Buildings Impacted by Vibration

Station Platform

Proposed

Existing

Vibration Mitigation

Commuter Rail Mitigation

Green Line Mitigation

Green Line Extension Project

Figure 7-8

Vibration Impacts and Mitigation Measures

Sheet 3 of 5

Sources: Harris Miller Miller & Hanson Inc.



Legend

Project Area

Station Platform

Proposed

Existing

Vibration Mitigation

Buildings Impacted by Vibration

Commuter Rail Mitigation

Green Line Mitigation

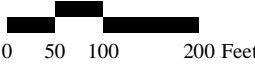


Green Line Extension Project

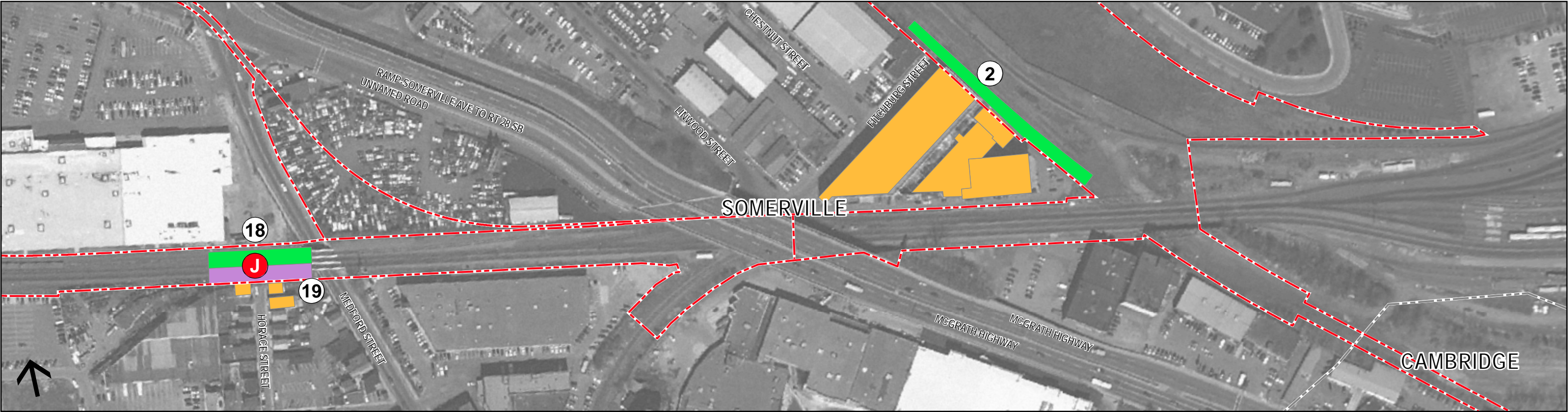
Figure 7-9

Vibration Impacts and Mitigation Measures

Sheet 4 of 5



Sources: Harris Miller Miller & Hanson Inc.



Legend

	Project Area		Buildings Impacted by Vibration
	Proposed		Commuter Rail Mitigation
	Existing		Green Line Mitigation

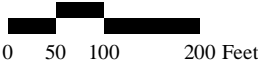


Green Line Extension Project

Figure 7-10

Vibration Impacts and Mitigation Measures

Sheet 5 of 5



Sources: Harris Miller Miller & Hanson Inc.