

# ENF Environmental Notification Form

*For Office Use Only*  
 Executive Office of Environmental Affairs

EOEA No.: **13886**  
 MEPA Analyst: **Deirdre Buckley**  
 Phone: 617-626-**1044**

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

<b>Project Name: Green Line Extension</b>		
Street:		
Municipality: <b>Cambridge, Somerville, Medford</b>	Watershed: <b>Boston Harbor</b>	
Universal Tranverse Mercator Coordinates: <b>(See Attachment 3 for location)</b>	Latitude: <b>(See Attachment 3 for location)</b>	
	Longitude:	
Estimated commencement date: <b>2011</b>	Estimated completion date: <b>2014</b>	
Approximate cost: <b>\$550 million</b>	Status of project design: <b>0</b> %complete	
Proponent: <b>Executive Office of Transportation (EOT)</b>		
Street: <b>10 Park Plaza Suite 4150</b>		
Municipality: <b>Boston</b>	State: <b>MA</b>	Zip Code: <b>02116</b>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <b>Stephen Woelfel</b>		
Firm/Agency: <b>EOT Office of Transportation Planning</b>	Street: <b>10 Park Plaza Suite 4150</b>	
Municipality: <b>Boston</b>	State: <b>MA</b>	Zip Code: <b>02116</b>
Phone: <b>617-973-7474</b>	Fax: <b>617-973-8035</b>	E-mail: <b>steve.woelfel@state.ma.us</b>

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  
 Yes  No
- Has this project been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Has any project on this site been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8))  Yes  No
  - a Special Review Procedure? (see 301 CMR 11.09)  Yes  No
  - a Waiver of mandatory EIR? (see 301 CMR 11.11)  Yes  No
  - a Phase I Waiver? (see 301 CMR 11.11)  Yes  No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

Any state financial assistance and/or land transfer will be further defined in the EIR. Funding is expected to come from state and local funds. All land to be used by the project is owned by the MBTA or private land owners. There are no land transfers expected from any agencies of the Commonwealth.

Are you requesting coordinated review with any other federal, state, regional, or local agency?  
 Yes (Specify)  No

List Local or Federal Permits and Approvals:

While the Executive Office of Transportation is the project proponent, the MBTA will own and operate the project. As an entity of the Commonwealth of Massachusetts, the MBTA is generally exempt from the requirements of municipal permitting programs.

The federal and state permits and approvals anticipated to be required are listed below:

Determination of No Adverse Effect to Historic or Archaeological Resources, Section 106 of the National Historic Preservation Act – Commonwealth of Massachusetts Historical Preservation Officer - for the Susan Russell House which is listed on the National Register of Historical Places.

National Pollution Discharge Elimination System General Permit, Section 402, Federal Clean Water Act – U.S. Environmental Protection Agency, Massachusetts Department of Environmental Protection.

Massachusetts Highway Department access permits – numerous locations

Department of Conservation Resources (DCR) access permits – for work affecting DCR bridges

EOT and the MBTA will continue to hold extensive public meetings in the affected communities to discuss local issues and concerns, and will take these into consideration in the process of refining the project.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- |  |                                       |   |
|--|---------------------------------------|---|
| <input checked="" type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands                 |
| <input type="checkbox"/> Water           | <input type="checkbox"/> Wastewater   | <input checked="" type="checkbox"/> Transportation                        |
| <input type="checkbox"/> Energy          | <input type="checkbox"/> Air          | <input type="checkbox"/> Solid & Hazardous Waste                          |
| <input type="checkbox"/> ACEC            | <input type="checkbox"/> Regulations  | <input checked="" type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input checked="" type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	54			
New acres of land altered*		0		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage**	TBD	TBD	TBD	
Number of housing units	NA	NA	NA	
Maximum height (in feet)**	NA	TBD	TBD	
<b>TRANSPORTATION</b>				
Vehicle trips per day	NA	Up to -13,000	Up to -13,000	
Parking spaces***	0	TBD	TBD	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	TBD	TBD	TBD	
GPD water withdrawal	NA	NA	NA	
GPD wastewater generation/ treatment	TBD	TBD	TBD	
Length of water/sewer mains (in miles)	NA	NA	NA	

\* It is assumed that all work will be conducted within areas that were previously altered.

\*\* "TBD" indicates that impacts will be determined at a later date when design plans are further advanced.

\*\*\* No additional parking spaces are proposed for stations. The maintenance and storage facility will have some MBTA employee parking.

**CONSERVATION LAND:** Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify \_\_\_\_\_)  No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify \_\_\_\_\_)  No

**RARE SPECIES:** Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify \_\_\_\_\_)  No

**HISTORICAL / ARCHAEOLOGICAL RESOURCES:** Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify: Susan Russell House, 58 Sycamore St. Somerville )  No

The Susan Russell House is listed on the National Register of Historic Places and is located adjacent to the rail right of way for the existing Lowell Commuter Rail. The commuter rail tracks will be moved closer to the house but within the rail right of way. No alterations to this structure are anticipated.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_)  No

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify \_\_\_\_\_)  No

**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The Green Line Extension Project is an initiative of the Executive Office of Transportation (EOT) and the Massachusetts Bay Transportation Authority (MBTA) to implement enhancements to transit services that will improve mobility and regional access for residents in the northwest corridor communities of Somerville, Medford, and Cambridge. Traffic congestion, mode transfer, and service delays hamper access from the study area to downtown Boston, and to employment and services in the study area. The purpose of the project is to improve corridor mobility, boost transit ridership, improve regional air quality, ensure equitable distribution of transit services, and support opportunities for smart growth initiatives and sustainable development. The project would extend from the outer limit of the relocated Lechmere Station project along the Lowell commuter rail line to the Medford Hillside section of Medford and along the Fitchburg commuter rail line to the vicinity of Union Square in Somerville.

The corridor has been the subject of numerous studies dating back to 1962. Most recently, the Beyond Lechmere Northwest Corridor Study conducted a Major Investment Study/Alternatives Analysis (MIS/AA) that evaluated a wide range and mixture of technologies and operating plans. The study area for the MIS/AA was generally bounded by Interstate 93 and the Orange Line to the east, the Red Line and the Fitchburg Commuter Rail Line to the west and south, and the West Medford Commuter Rail Station to the north. This area includes East Cambridge, Somerville and sections of Medford. The area consists of densely settled urban corridors with a large base of commuters and transit users. The study area was defined, based on community input, as the area that is currently underserved by fixed-guideway transit. In the study, a tiered analysis of alternatives began with nine build alternatives. The nine alternatives encompassed several different single transit modes and some included multiple modes. Six of the alternatives included Green Line extensions, four included Bus Rapid Transit (BRT), and three included commuter rail enhancements. The nine alternatives were narrowed down to five build alternatives – two Green Line, two commuter rail and one combination of

Green Line and Bus Rapid Transit – that were subjected to additional evaluation. A Transportation Systems Management Alternative was also considered.

The Beyond Lechmere Northwest Corridor Study did not identify a preferred alternative. However, the State Implementation Plan (SIP), as well as a draft amendment to the SIP, identify an extension of the Green Line as the preferred alternative for the corridor. EOT, the MBTA and the Boston Region Metropolitan Planning Organization (MPO) have received hundreds of comments over the last several years, both during the generation of MPO certification documents and the SIP reevaluation and subsequent amendment process, in support of the project.

As currently envisioned by EOT, the project would consist of two branches – an extension of the main line to Medford and a spur line to Union Square in Somerville. The extension of the main line would begin at the end of the proposed tail tracks of the relocated Lechmere Station and extend along the west side of the Lowell Line right-of-way ending in Medford Hillside. The Union Square Branch would diverge off the tail tracks where they cross the Fitchburg Line and extend along the north side of the Fitchburg Line ending in the vicinity of Union Square. Stations are currently proposed to be located in the vicinity of:

- College Avenue/Medford Hillside (Medford Hillside Branch)
- Broadway/Ball Square, Somerville (Medford Hillside Branch)
- Lowell Street, Somerville (Medford Hillside Branch)
- Medford Street/Gilman Square, Somerville (Medford Hillside Branch)
- Washington Street, Somerville (Medford Hillside Branch)
- Union Square, Somerville (Union Square Branch)

In addition to these stations, EOT will also examine the feasibility of extending the line beyond Medford Hillside to a station to be located in the vicinity of Winthrop Street in Medford.

This EENF addresses only the preferred alternative that has been identified in the SIP. Other alternatives may have additional impacts. This information is based on the analyses in the MIS/AA, supplemented by additional information.

The Single Environmental Impact Report (SEIR) for the project will consider the following alternatives:

1. No Action
2. Green Line to Medford Hillside (with possible extension to Winthrop Street) via Lowell Line and Union Square via Fitchburg Line

The SEIR will be prepared in accordance with the Secretary's Certificate on the Expanded Environmental Notification Form. The SEIR will be built on the EENF framework that responds to the Secretary's EENF Certificate. The SEIR will contain the following:

- Table of Contents
- Executive Summary
- Project History
- Description of the proposed action
  - The proposed Green Line extension will be documented in greater detail including specific station locations, track relocations, and bridge replacement needs, as well as documentation of any need for expansion of the rail right-of-way.
- Summary of the Alternatives considered and rationale for selection of the Preferred Alternative
  - Only two alternatives will be considered: No Action and Extension of the Green Line to Medford via the Lowell Line and to Union Square via the Fitchburg Line. The rationale for selection of the preferred alternative will be documented, including the prior studies and the extensive public involvement process.
- Description of the existing environment
  - This will include the existing land use, transportation systems, and social, economic, and cultural environment
- Description of project impacts due to construction and operations
  - The SEIR will document the expected improvements in traffic congestion and air quality resulting from the operation of the Green Line Extension, while also documenting any

localized traffic impacts around the stations resulting from bus traffic and passenger drop-offs and mitigation measures to reduce these impacts. With the refinement of the station locations, track relocations and bridge improvement needs, the SEIR will be able to address the impacts that would result from replacement of several bridges including any specific localized land takings. Any impacts on access to businesses and residences, during or after construction, will be documented. Impacts on freight railroad operations will be addressed and mitigation measures will be identified. Impacts on noise, vibration, and the visual environment will also be documented. Mitigation measures for any hazardous sites affected by construction will be identified.

- Proposed Section 61 Findings (mitigation commitments)
- Comment letters on the EENF and responses to comments
- Supporting graphics, including project location, existing conditions (sensitive receptors, environmental impacts including visual environment, cultural resources, traffic volumes and patterns), conceptual design (cross-sections, platforms and stations, streetscape), and mitigation elements.
- Technical Appendix, noise and vibration analyses
- Technical Appendix, air quality analysis
- Technical Appendix, traffic analysis

This EENF will be filed in October 2006 with the SEIR completed by November 2008. Construction is expected to start 36 months after completion of the SEIR (November 2011 if the SEIR is completed as planned). Service is anticipated to begin in December 2014.

Additional descriptions of the project are contained in Attachments 2, 5.1, and 5.2. Attachment 2 describes the preferred alternative in more detail. Attachment 5.1 summarizes the analyses conducted for the alternatives considered in the MIS/AA. Attachment 5.2 presents additional environmental information developed for the preferred alternative since completion of the MIS/AA.