## **Trapelo Road and Belmont Street Roadway Improvement Project Environmental Notification Form**

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

March 2011

<u>Prepared for:</u> MassDOT – Highway Division 10 Park Plaza, Room 4260 Boston, MA 02116

MassDOT File No. 604688 BSC Project No. 28172.02

Prepared by:



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March 15, 2011

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Secretary Richard K. Sullivan, Jr. Executive Office of Energy and Environmental Affairs Attn: MEPA Office 100 Cambridge Street, Suite 900 Boston, MA 02114

#### RE: Environmental Notification Form MassDOT Trapelo Road/Belmont Street Corridor Improvement Project Belmont and Watertown, MA

Dear Secretary Sullivan:

BSC Group, Inc. (BSC) is pleased to submit this Environmental Notification Form (ENF), on behalf of the Massachusetts Department of Transportation (MassDOT) for proposed roadway and intersection improvements along the Trapelo Road and Belmont Street corridor in Belmont and Watertown. The project will improve roadway and sidewalk surface conditions to better accommodate vehicular, bicycle and pedestrian traffic. Additional project elements include replacing antiquated traffic signal systems with new traffic responsible equipment, narrowing paved sections of the roadway in selected areas, and replacing these impervious areas with landscaped strips and trees, and stormwater management improvements along the corridor.

This project is subject to MEPA jurisdiction pursuant to 301 CMR 11.03(6)(b)2(b), as the project is being undertaken by an agency and will require the removal of more than five trees with a diameter of 14 inches or greater. No state permits are required.

To assist in your review of this project, enclosed please find a copy of the ENF Form, a site Locus map, a project description, and project plans. If you have any questions, please do not hesitate to contact me at 617-896-4355.

Thank you for your consideration in this matter.

Sincerely, BSC Group, Inc. Jeffrey T. Malloy Environmental Planner cc: MassDOT – Insert Applicant Attachment C – Distribution List Surveyors

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### **Environmental Notification Form**

For Office Use Only

EEA#: ------

MEPA Analyst: \_\_\_\_\_

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Trapelo Road/Belmo			ovement Project
Street Address: Trapelo Road and E		1	
Municipality: Belmont and Watertow			stic and Charles River
Universal Transverse Mercator Coord	dinates:		3'28" to 42* 22'31"
UTM NAD 83		0	11' 54" to -71*09' 17"
Northwest Project Limit: N4695442			
Southeast Project Limit: N4693680			
Estimated commencement date: Sprin	<u> </u>		pletion date: Fall 2015
Project Type: State Roadway Impro			
Proponent: Massachusetts Departm		Fransportation -	<ul> <li>Highway Division</li> </ul>
Street Address: 10 Park Plaza, Roor	n 4260		
Municipality: Boston		State: MA	Zip Code: 02116
Name of Contact Person: Jeffrey T. I	Malloy		
Firm/Agency: BSC Group, Inc.		Street Address:	15 Elkins Street
Municipality: Boston		State: MA	Zip Code: <b>02127</b>
Phone: <b>(617) 896-4300</b>	Fax: <b>(6</b>	617) 269-0139	E-mail: jmalloy@bscgroup.com
If this is an Expanded Environmental Noti Notice of Project Change (NPC), are you a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CMR a Waiver of mandatory EIR? (see 301 CMR 1 a Phase I Waiver? (see 301 CMR 11.11) (Note: Greenhouse Gas Emissions analysis re	requestii 11.09) 1.11)	ng: ☐Yes ⊠No ☐Yes ⊠No ☐Yes ⊠No ☐Yes ⊠No	
Which MEPA review threshold(s) does the <b>Transportation – 310 CMR 11.03(6)(</b> Which State Agency Permits will the projectoral: Negative Determination of Applicab Federal: National Pollutant Discharge Elim	( <b>b)2(b))</b> ect requir <b>bility from</b>	e? the Belmont Cons	servation Commission

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: Funding to be provided by MassDOT (approximately \$15 million). Land transfer from the Belmont Housing Authority to the Town of Belmont.

Summary of Project Size	Existing	Change	Total
& Environmental Impacts			
LAND			
Total site acreage	37.5		
New acres of land altered		36.6	
Acres of impervious area	36.6	-2.60	34.0
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		29,000	
Acres of new non-water dependent use of tidelands or waterways		N/A	
STRUCTURES			
Gross square footage	N/A	N/A	N/A
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	24,000	0	24,000
Parking spaces	516	-50	466
WASTEWATER			
Water Use (Gallons per day)	N/A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A
Has this project been filed with MEP.	A before?		
Has any project on this site been file Yes (EEA #) ⊠No	d with MEPA bef	ore?	

#### **GENERAL PROJECT INFORMATION – all proponents must fill out this section**

#### **PROJECT DESCRIPTION:**

Describe the existing conditions and land uses on the project site:

The Massachusetts Department of Transportation – Highway Division (MassDOT) proposes roadway and intersection improvements along the Trapelo Road and Belmont Street corridor in Belmont and Watertown, Massachusetts. The Trapelo Road/Belmont Street corridor starts at Route I-95 in Waltham and extends approximately 5.5 miles through Waltham and Belmont. As shown in the site figures provided in Attachment A, Plan of Existing Conditions, the majority of the corridor is associated with Trapelo Road. Where Trapelo Road ends, Belmont Street continues for an additional 1.0 mile through Belmont, Watertown and Cambridge finally ending at Mount Auburn Street in Cambridge. The proposed improvement project concentrates on a 2.5 mile section of the Trapelo Road at a point approximately 50-feet east of the Belmont/Waltham boundary (characterized by the centerline of Beaver Brook) and extends east through Belmont where it terminates at the Belmont/Cambridge boundary. The roadway layout is generally 75-feet wide, with two 21-foot travel lanes, two 8-foot parking lanes, and two 8.5-foot sidewalks. The pavement surface is in poor condition having not been re-paved for at least 25-years.

Land use along Trapelo Road and Belmont Street is a mix of commercial and residential development. Other prominent land uses include the open space and recreation associated with the Beaver Brook Reservation, a state park near the Waltham city line, the Oakley Country Club along the southern side of Belmont Street between Trapelo Road and Commonwealth Road in Watertown, and Pequossette Playground, also situated on the south side of Trapelo Road between Walnut Street and Bartlett Avenue.

Describe the proposed project and its programmatic and physical elements:

The Massachusetts Department of Transportation – Highway Division (MassDOT) proposes roadway and intersection improvements along the Trapelo Road and Belmont Street corridor in Belmont and Watertown, Massachusetts. The purpose of the project is to improve roadway and sidewalk surface conditions to both accommodate vehicular, bicycle and pedestrian traffic. Additional project elements include replacing antiquated traffic signal systems along the corridor with new traffic responsive equipment, replacing unessential impervious area with landscaping, and improving the existing stormwater management system. A USGS Site Locus map is provided in Attachment A.

There is currently no bicycle accommodation along the entire length of the Trapelo Road/Belmont Street corridor. The travel lanes are very wide on Belmont Street (one 21foot lane in each direction) however they are commonly driven much of the time as two narrow 10.5 lanes making it confusing for drivers. While much of Trapelo Road has been re-striped, providing a wide 9-foot shoulder between 12-foot travel lanes and the parking lane, the shoulder reduces to 2 feet at the crosswalk and neckdowns and disappears at the signalized intersections.

Sidewalks are located along both sides of the street, except for the northerly side of Trapelo Road within proximity of Mill Street, Agassiz Street and Pleasant Street. The sidewalks are generally 8.5 feet in width, often with a planting strip within the residential areas. Vertical granite curb defines the edge of roadway except for much of the south side of Belmont Street between Trapelo Road and Arlington Street. Most of the intersections have some form of wheelchair ramp, however very few meet current Architectural Access Board standards. The condition of the sidewalks can vary depending on when they were last reconstructed. Some sections remain in very poor condition.

The existing drainage system consists of dual trunk lines along Belmont Street and a single trunk line on Trapelo Road. Catch basins are located along the roadway at a spacing of approximately 400 feet or more. In some residential areas, runoff is directed to side streets and enters the local street systems. Stormwater flows west of Lexington Street (including Mill Street) head toward the Beaver Brook, an impaired (2010 Massachusetts Integrated List of Impaired Waterways) tributary to the Charles River. While the Beaver Brook is located within the Charles River Watershed, the section of roadway east of Lexington Street is located in the Mystic River Watershed. Approximately 29,000 square feet of RFA will be temporarily altered for resurfacing of the roadway, sidewalk construction and stormwater management upgrades. Impacts within RFA will occur within the previously disturbed roadway and roadside shoulders of Trapelo Road. MassDOT will submit a request for a Negative Determination of Applicability from the Belmont Conservation Commission.

The project is subject to MEPA review because it is being undertaken by an agency and will require cutting five or more living public shade trees of 14 or more inches in diameter at breast height (310 CMR 11.03(6)(b)2(b)).

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Project alternatives considered included the preferred alternative as well as "no-build" and "replacement in-kind" alternatives. The "no-build" alternative was rejected because it would allow the existing substandard roadway conditions along the Trapelo Road/Belmont Street corridor to continue. Under a no-build alternative, the roadway would remain too narrow to accommodate bicyclists. Excessive pavement would remain in areas that are proposed as new landscaping under the preferred design. The volume of stormwater runoff from the roadway would be increased over the preferred design and no upgrades to the stormwater management system would be completed.

A "replacement in-kind" alternative was considered for the rehabilitation of the Trapelo Road/Belmont Street corridor and rejected as it would not improve current deficiencies. The roadway width would continue to present a confusing situation for drivers. Bicycle accommodation would not be provided along the roadway and pedestrian safety issues would remain. This alternative was further rejected because it did not address concerns such as inadequacies in the corridor's drainage system.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The preferred alternative consists of the rehabilitation of the roadway surface, primarily through resurfacing, the widening or narrowing the curb-to-curb width to adequately accommodate the present and future vehicle and bicycle traffic demand, to reconstruct the sidewalks to provide safe and efficient pedestrian access and to replace the antiquated traffic signal systems along the corridor with new traffic responsive equipment. The project requires cutting down approximately 35 living public shade trees with a diameter of 14 or more inches.

Under the preferred alternative, the roadway will be rehabilitated with micro-milling (2.25inches) and overlay (3.5-inches), using full depth pavement only where necessary to widen the roadway or to replace poor utility trench repairs. For much of the corridor the roadway width will be narrowed to allow for one travel lane, a parking lane and a minimum 4-foot paved shoulder for bicycle accommodation in each direction. The existing traffic signal systems along the corridor will be replaced with new actuated systems with pedestrian signals and emergency preemption. Several intersections will be realigned to improve traffic operations and safety.

Bicycle lane accommodation will be provided for the length of the corridor to increase bicycle safety and reduce vehicle trips. Existing sidewalks will be reconstructed with provisions for those with disabilities and a new sidewalk will be constructed in areas where there is currently no sidewalk. Narrowing the roadways, select sidewalk bumpouts, new handicap ramps and new signal installations with pedestrian indications will improve overall pedestrian mobility. Streetscape and landscape improvements will be provided, especially in the commercial areas to encourage business. On and off-street commuter parking will be retained and the locations of the bus stops have been investigated to see if their present location is optimum. Minor changes to bus stop locations include the elimination of one stop and the movement of a few others.

There would be a net reduction in impervious areas under the preferred design because areas of excessive pavement will be eliminated, thus reducing the amount of runoff from the roadway and increasing landscaped green space along the corridor. Along most of the corridor, new catch basins with 4-foot sumps will be installed whenever drainage indicates that the 10-year gutter flow will extend to the center of the inner travel lane and before significant quantities of gutter flow crosses a crosswalk. Additional drainage improvements within proximity of the Beaver Brook include re-routing some of the roadway drainage to a proposed vegetated infiltration swale prior to discharging indirectly to Beaver Brook.

The preferred design will improve overall air quality in the corridor through improved traffic flow with a traffic responsive signal system. In addition, the corridor will become more attractive to pedestrians, bicyclists and users of public transportation, thereby reducing vehicle trips. Although the project will require the removal of approximately 35 living public shade trees with a diameter of 14 inches or greater, the proposed roadway improvements include the planting of approximately 450 trees along the corridor to provide shade to pedestrians, improve air quality and lessen noise. As noted above, the preferred design will also improve stormwater management along the corridor. The preferred design is a reflection of a comprehensive planning process through Traffic Advisory Committee to solicit input from residents, business owners and town committees in public hearings. The preferred design for improvements to the corridor has received the unanimous support of the Belmont Board of Selectmen.

If the project is proposed to be constructed in phases, please describe each phase:

The proposed project will not occur in Phases. The anticipated project start date is Spring 2014 and the anticipated project completion date is Fall 2015.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:
Is the project within or adjacent to an Area of Critical Environmental Concern?
Yes (Specify)
No (
if yes, does the ACEC have an approved Resource Management Plan? Yes No;
If yes, describe how the project complies with this plan.
Will there be stormwater runoff or discharge to the designated ACEC? Yes No;
If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated
ACEC.
RARE SPECIES:
Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see
http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)
□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) □No
Belmont – Harvard Lawn (BLM.BU), William P. Hale Estate (BLM.BV) Stults Estate (BLM.BW),
Marion Road Streetscape (BLM.CQ), Samuel L. Barnard Estate (BLM.G) Payson Park (BLM.B)
Cushing Square (BLM.C) Our Lady of Mercy Roman Catholic Church (BLM.CZ) Waverly Land
Company Area (BLM.AF) Waverly Square (BLM.AG) H.F. Campbell Subdivision (BLM.AH) Trapelo
Road Streetscape (BLM.CL) and the Palfrey Estate (BLM.H).

Watertown – Chenery House at 486 Belmont Street (WAT.135).

If yes, does the project involve any demolition or destruction of any listed or inventoried h	istoric
or archaeological resources?  Yes (Specify)	⊠No

#### WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? X Yes No:

if yes, identify the ORW and its location. Fresh Pond\_\_\_\_\_

Are there any impaired water bodies on or within a half-mile radius of the project site? X Yes \_\_\_\_No; if yes, identify the water body and pollutant(s) causing the impairment:

Beaver Brook impairments include: E.Coli, excess algal growth, non-native aquatic plants, anthropogenic substrate alteration, biological indicators, taste and odor and total phosphorus. A Final Total Maximum Daily Load (TMDL) exists for the Charles River Watershed (January 2007).

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? \_\_\_\_Yes X No

#### **STORMWATER MANAGEMENT:**

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

The Trapelo Road/Belmont Street Corridor Improvement Project is considered to be a redevelopment project in the Massachusetts Stormwater Management Handbook. As defined in the handbook, redevelopment projects include "maintenance and improvement of existing roadways, including widening of less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage and repaving." In accordance with the handbook, the project will comply with the stormwater management standards to the maximum extent practicable and will result in an overall improvement to existing conditions. Additionally, the project has been designed to comply with the Massachusetts Department of Transportation Stormwater Handbook (2004).

The proposed stormwater management improvements include the replacement of most of the existing catch basins along the project route with 120 new, 4-foot deep sump catch basins. Additionally, a portion of the roadway runoff within proximity of the Beaver Brook will be re-directed to a vegetated infiltration swale prior to indirectly discharging to Beaver Brook.

The project will also comply with the requirements under the National Pollutant Discharge Elimination System Program for construction activities. As the project will result in disturbance of more than 1-acre of land, a Stormwater Pollution Prevention Plan outlining Best Management Practices to be undertaken during construction to prevent sedimentation of waterways or wetlands will be prepared prior to the start of construction. The Best Management Practices to be implemented on site during the construction phase would include temporary and permanent stabilization and use of perimeter controls upstream of wetlands and waterways.

#### MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes \_\_\_\_ No X; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):\_\_\_\_\_

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes \_\_\_\_ No X; if yes, describe which portion of the site and how the project will be consistent with the AUL:

\_\_\_\_\_·

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes \_\_\_\_ No X; if yes, please describe:\_\_\_\_\_

#### SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

#### [To be provided by MassDOT].

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes \_\_\_\_ No X; if yes, please consult state asbestos requirements at <u>http://mass.gov/MassDEP/air/asbhom01.htm</u>

Describe anti-idling and other measures to limit emissions from construction equipment:

#### [To be provided by MassDOT]

#### DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes \_\_\_\_ No X; if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River? Yes No ; if yes, specify name of river and designation: ;

if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River. Yes No ;

if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

#### ATTACHMENTS:

- 1. List of all attachments to this document.
- 2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.
- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.
- 5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
- 6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
- 7. List of municipal and federal permits and reviews required by the project, as applicable.

#### LAND SECTION - all proponents must fill out this section

#### I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1) \_\_\_\_ Yes **X** No; if yes, specify each threshold:

#### **II. Impacts and Permits**

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	<u>Total</u>
Footprint of buildings	N/A	N/A	N/A
Internal roadways including			
Parking and other paved areas	35.9	-3.4	32.5
Other altered areas	1.5	+0.95	2.45
Undeveloped areas			
Total: Project Site Acreage	37.5	-2.45	35.05

- B. Has any part of the project site been in active agricultural use in the last five years?
   \_\_\_\_ Yes X No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?
- C. Is any part of the project site currently or proposed to be in active forestry use?
   \_\_\_\_\_ Yes X No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:
- D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? \_\_\_\_ Yes X No; if yes, describe:
- E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? X
   Yes\_\_\_\_\_No; if yes, does the project involve the release or modification of such restriction?
   Yes \_\_\_\_\_No; if yes, describe:
- F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? \_\_\_\_ Yes X No; if yes, describe:
- G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes \_\_\_\_ No X; if yes, describe:

#### **III. Consistency**

- A. Identify the current municipal comprehensive land use plan Title: Town of Belmont Community Development Plan Date: February 2004
- B. Describe the project's consistency with that plan with regard to:
  - 1) economic development \_\_\_\_\_
  - 2) adequacy of infrastructure \_\_\_\_\_
  - 3) open space impacts \_\_\_\_
  - 4) compatibility with adjacent land uses\_\_\_\_\_

## The Town of Belmont completed a study of the corridor and the project is listed in the Town of Belmont's Community Development Plan.

- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA) RPA Title: **MetroFuture Regional Plan** Date: **March 2008**
- D. Describe the project's consistency with that plan with regard to:
  - 1) economic development \_\_\_\_\_
  - 2) adequacy of infrastructure \_\_\_\_\_
  - 3) open space impacts \_\_\_\_\_

The current Regional Policy Plan is the Metropolitan Area Planning Council's *MetroFuture*. The proposed project is consistent with *MetroFuture's* goals of increasing walking and biking and decreasing driving, reducing suburban congestion, and maintaining and improving existing transportation assets.

#### RARE SPECIES SECTION

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to rare species or habitat? \_\_\_\_ Yes X No
- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? \_\_\_\_ Yes X No.
- D. If you answered "No" to <u>all</u> questions A, B and C, proceed to the Wetlands, Waterways, and Tidelands Section. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Rare Species section below.

#### **II. Impacts and Permits**

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? \_\_\_\_ Yes \_\_\_\_ No. If yes,

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? \_\_\_Yes \_\_\_No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? \_\_\_\_Yes \_\_\_\_No; if yes, attach the letter of determination to this submission.

2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? \_\_\_\_ Yes \_\_\_\_ No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts

3. Which rare species are known to occur within the Priority or Estimated Habitat?

4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? \_\_\_\_ Yes \_\_\_\_ No

4. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? \_\_\_\_ Yes \_\_\_\_ No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? \_\_\_\_ Yes \_\_\_\_ No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? \_\_\_\_ Yes \_\_\_\_ No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

#### WETLANDS, WATERWAYS, AND TIDELANDS SECTION

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands**, **waterways**, **and tidelands** (see 301 CMR 11.03(3))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands**, **waterways, or tidelands**? \_\_\_\_\_ Yes **X** No; if yes, specify which permit:

Project activities will occur within previously disturbed portions of Riverfront Area (RFA) and the 100-foot Buffer Zone to Inland Bank and Bordering Vegetated Wetland, each associated with the Beaver Brook. A Request for Determination of Applicability will be filed with the Belmont Conservation Commission.

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

#### **II. Wetlands Impacts and Permits**

- A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? \_\_\_\_ Yes X No; if yes, has a Notice of Intent been filed? \_\_\_ Yes \_\_\_ No; if yes, list the date and MassDEP file number: \_\_\_\_\_; if yes, has a local Order of Conditions been issued? \_\_\_ Yes \_\_\_ No; Was the Order of Conditions appealed? \_\_\_ Yes \_\_\_ No. Will the project require a Variance from the Wetlands regulations? \_\_\_ Yes \_\_\_ No.
- B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

Beaver Brook is a perennial stream that flows from north to south through a culvert beneath Trapelo Road and in this area forms the Belmont/Waltham line. A 200-foot RFA extends from the mean high water line of Beaver Brook. Additionally, Inland Bank, Bordering Vegetated Wetland, Land Under Waterways and Water Bodies and Bordering Land Subject to Flooding are associated with Beaver Brook.

No adverse impacts to wetland resource areas are anticipated. Approximately 29,000 square feet of RFA will be temporarily altered for resurfacing of the roadway, sidewalk construction and stormwater management upgrades. However, impacts within RFA will occur within the previously disturbed roadway and roadside shoulders of Trapelo Road and will result in reduced impervious area and improved stormwater treatment.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

Coastal Wetlands	<u>Area (square feet) or</u> Length (linear feet)	Temporary or Permanent Impact?
Land Under the Ocean Designated Port Areas Coastal Beaches Coastal Dunes Barrier Beaches Coastal Banks Rocky Intertidal Shores Salt Marshes Land Under Salt Ponds Land Containing Shellfish		

Fish Runs		
Land Subject to Coastal Storm Flowage		
Inland Wetlands		
Bank (If)		
Bordering Vegetated Wetlands		
Isolated Vegetated Wetlands		
Land under Water		
Isolated Land Subject to Flooding		
Borderi ng Land Subject to Flooding		
Riverfront Area	29,000 s.f.	

#### D. Is any part of the project:

- 1. proposed as a limited project? X Yes \_\_\_\_ No; if yes, what is the area (in sf)?\_\_\_\_\_
- 2. the construction or alteration of a **dam**? \_\_\_\_ Yes X No; if yes, describe:
- 3. fill or structure in a velocity zone or regulatory floodway? \_\_\_\_ Yes X No
- 4. dredging or disposal of dredged material? \_\_\_\_ Yes X No; if yes, describe the volume
- of dredged material and the proposed disposal site:
- 5. a discharge to an Outstanding Resource Water (ORW) or an Area of Critical Environmental Concern (ACEC)? \_\_\_\_ Yes X No 6. subject to a wetlands restriction order? \_\_\_\_ Yes X No; if yes, identify the area (in sf):
- 7. located in buffer zones? X Yes \_\_\_\_No; if yes, how much (in sf)

#### Approximately 15,500 square feet of project activities will occur within the Buffer Zone to Bordering Vegetated Wetland And Inland Bank.

- E. Will the project:
  - 1. be subject to a local wetlands ordinance or bylaw? Yes **X** No
  - 2. alter any federally-protected wetlands not regulated under state law? \_\_\_\_ Yes X No; if yes, what is the area (sf)?

The project will result in an overall improvement to existing wetland conditions by reducing impervious area and providing better stormwater capture and treatment.

#### III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? \_\_\_\_ Yes X No; if yes, is there a current Chapter 91 License or Permit affecting the project site? \_\_\_\_ Yes X No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

C. Does the project require a new or modified license or permit under M.G.L.c.91? \_\_\_\_ Yes X No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current \_\_\_\_ Change \_\_\_\_ Total

If yes, how many square feet of solid fill or pile-supported structures (in sf)?

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site: N/A\_

Area of filled tidelands covered by buildings: N/A

For portions of site on filled tidelands, list ground floor uses and area of each use: N/A

Does the project include new non-water-dependent uses located over flowed tidelands? Yes No

Height of building on filled tidelands

Also show the following on a site plan: Mean High Water, Mean Low Water, Waterdependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

- D. Is the project located on landlocked tidelands? \_\_\_\_ Yes X No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:
- E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? \_\_\_\_Yes
   X No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:
- F. Is the project non-water-dependent and located on landlocked tidelands or waterways or tidelands subject to the Waterways Act and subject to a mandatory EIR? \_\_\_\_ Yes \_\_\_\_ No; X

(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? \_\_\_\_ Yes X No; if yes, answer the following questions: What type of dredging? Improvement \_\_\_\_ Maintenance \_\_\_\_ Both \_\_\_\_ What is the proposed dredge volume, in cubic yards (cys) What is the proposed dredge footprint \_\_\_\_length (ft) \_\_\_width (ft)\_\_\_depth (ft); Will dredging impact the following resource areas? No\_\_; if yes, \_\_\_ sq ft Intertidal Yes Outstanding Resource Waters Yes\_ No\_; if yes, \_\_\_\_ sq ft Other resource area (i.e. shellfish beds, eel grass beds) Yes No ; if yes sa ft If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation? If no to any of the above, what information or documentation was used to support this determination? Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis. Sediment Characterization Existing gradation analysis results? \_\_Yes \_\_\_No: if yes, provide results. Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? \_\_\_\_Yes \_No; if yes, provide results. Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option. Beach Nourishment Unconfined Ocean Disposal Confined Disposal: Confined Aquatic Disposal (CAD) \_\_\_\_ Confined Disposal Facility (CDF) Landfill Reuse in accordance with COMM-97-001 Shoreline Placement Upland Material Reuse In-State landfill disposal Out-of-state landfill disposal (NOTE: This information is required for a 401 Water Quality Certification.)

#### IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? \_\_\_\_ Yes **X** No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

B. Is the project located within an area subject to a Municipal Harbor Plan? \_\_\_\_ Yes **X** No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

#### WATER SUPPLY SECTION

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Water Supply Section below.

#### **II. Impacts and Permits**

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	Existing	<u>Change</u>	<u>Total</u>
Municipal or regional water supply			
Withdrawal from groundwater			
Withdrawal from surface water			
Interbasin transfer			

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? \_\_\_\_ Yes \_\_\_\_ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? \_\_\_\_ Yes \_\_\_\_ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. \_\_\_\_\_

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? \_\_\_\_\_Will the project require an increase in that withdrawal? \_\_\_Yes \_\_\_No; if yes, then how much of an increase (gpd)? \_\_\_\_\_

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? \_\_\_\_\_Yes \_\_\_\_No. If yes, describe existing and proposed water supply facilities at the project site:

	Permitted <u>Flow</u>	Existing Avg <u>Daily Flow</u>	Project Flow	<u>Total</u>
Capacity of water supply well(s) (gpd) Capacity of water treatment plant (gpd)				
oupdoily of frator abdatton plant (gpa)				

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

- 1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? \_\_\_\_ Yes \_\_\_\_ No
- 2. a Watershed Protection Act variance? \_\_\_\_ Yes \_\_\_\_ No; if yes, how many acres of alteration?
- 3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking

water supply for purpose of forest harvesting activities? \_\_\_\_ Yes \_\_\_\_ No

#### III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

#### WASTEWATER SECTION

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Wastewater Section below.

#### **II. Impacts and Permits**

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	Existing	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater Discharge of industrial wastewater TOTAL			
<b>-</b>	Existing	<u>Change</u>	<u>Total</u>
Discharge to groundwater Discharge to outstanding resource water			
Discharge to surface water Discharge to municipal or regional wastewater			
facility			
TOTAL			

B. Is the existing collection system at or near its capacity? \_\_\_\_ Yes \_\_\_\_ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? \_\_\_\_ Yes\_\_\_\_ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? \_\_\_\_ Yes \_\_\_\_ No; if yes, describe as follows:

	Permitted	Existing Avg <u>Daily Flow</u>	Project Flow	<u>Total</u>
Wastewater treatment plant capacity (in gallons per day)				

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? \_\_\_\_ Yes \_\_\_\_ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? \_\_\_\_ Yes \_\_\_\_ No; if yes, what is the capacity (tons per day):

	Existing	<u>Change</u>	<u>Total</u>
Storage			
Treatment			
Processing			
Combustion			
Disposal			

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

#### III. Consistency

- A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:
- B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? \_\_\_\_ Yes \_\_\_\_ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

#### TRANSPORTATION SECTION (TRAFFIC GENERATION)

#### I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Traffic Generation Section below.

#### **II. Traffic Impacts and Permits**

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	Existing	<u>Change</u>	<u>Total</u>
Number of parking spaces			
Number of vehicle trips per day			·
ITE Land Use Code(s):			

#### B. What is the estimated average daily traffic on roadways serving the site?

Roadway	Existing	<u> Čhange</u>	<u>Total</u>
1			
2			
3			

- C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:
- D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?
- C. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? \_\_\_\_ Yes \_\_\_\_ No; if yes, describe if and how will the project will participate in the TMA:
- D. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? \_\_\_\_\_ Yes \_\_\_\_\_ No; if yes, generally describe:
- E. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

#### III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

## TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

#### I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? **X** Yes \_\_\_\_ No; if yes, specify, in quantitative terms:

The project will involve the removal of approximately 35 living shade trees with a diameter at breast height of 14-inches or greater. Approximately 450 trees will be planted as part of the roadway improvements.

B. Does the project require any state permits related to **roadways or other transportation facilities**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Energy Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Roadways Section below.

#### **II. Transportation Facility Impacts**

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

#### Please refer to project description.

- B. Will the project involve any
  - 1. Alteration of bank or terrain (in linear feet)?
  - 2. Cutting of living public shade trees (number)?
  - 3. Elimination of stone wall (in linear feet)?

0	
35_	
0	

**III. Consistency --** Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

The project will not conflict with any current Federal, State or Local plans or policies related to transportation. Funding through the State's Transportation Improvement Plan (TIP) will be sought for the proposed improvements.

The project has been designed in accordance with the Massachusetts Department of Transportation's (Highway Division) Project Development and Design Guide. In addition, the project is consistent with "Fix-it-First" smart growth recommendation of the Metropolitan Area Planning Council's Regional Bike Plan by improving an existing roadway rather than investing in new infrastructure. The design is also consistent with the Massachusetts Pedestrian Transportation Plan's Pedestrian Design Guidelines.

The project has been designed in conjunction with the Town of Belmont Traffic Advisory Committee. The project has been presented at six community meetings and a Belmont Board of Selectman meeting. The public has been supportive of the design of the proposed transportation improvements in the corridor.

#### **ENERGY SECTION**

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Energy Section below.

#### **II. Impacts and Permits**

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	ExistingChange	Total
Capacity of electric generating facility (megawatts)		
Length of fuel line (in miles)		
Length of transmission lines (in miles)		
Capacity of transmission lines (in kilovolts)		

B. If the project involves construction or expansion of an electric generating facility, what are:

- 1. the facility's current and proposed fuel source(s)?
- 2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? \_\_\_\_Yes \_\_\_\_No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

#### **III. Consistency**

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

#### **AIR QUALITY SECTION**

#### I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Solid and Hazardous Waste** Section. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Air Quality Section below.

#### **II. Impacts and Permits**

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? \_\_\_\_ Yes \_\_\_ No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter Carbon monoxide			
Sulfur dioxide Volatile organic compounds			
Oxides of nitrogen Lead			
Any hazardous air pollutant Carbon dioxide			

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

#### **III. Consistency**

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

#### SOLID AND HAZARDOUS WASTE SECTION

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? \_\_\_\_ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? \_\_\_\_ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

#### **II. Impacts and Permits**

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? <u>Yes</u> No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage			
Treatment, processing			
Combustion Disposal			
Dispusai	·····		

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? \_\_\_\_ Yes \_\_\_\_ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage			
Recycling			
Treatment			
Disposal			

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

- D. If the project involves demolition, do any buildings to be demolished contain asbestos? \_\_\_\_ Yes \_\_\_\_ No
- E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

#### **III. Consistency**

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

#### HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

#### I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? **X** Yes \_\_\_\_ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? \_\_\_\_Yes **X** No; if yes, attach correspondence: **Not Applicable**.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? X Yes \_\_\_\_ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? \_\_\_\_ Yes X No; if yes, please describe:

The project site is located within several historical districts and abuts several historical structures (See Below). No demolition of any historic structures is proposed. <u>Belmont</u> – Harvard Lawn (BLM.BU), William P. Hale Estate (BLM.BV) Stults Estate (BLM.BW), Marion Road Streetscape (BLM.CQ), Samuel L. Barnard Estate (BLM.G) Payson Park (BLM.B) Cushing Square (BLM.C) Our Lady of Mercy Roman Catholic Church (BLM.CZ) Waverly Land Company Area (BLM.AF) Waverly Square (BLM.AG) H.F. Campbell Subdivision (BLM.AH) Trapelo Road Streetscape (BLM.CL) and the Palfrey Estate (BLM.H). Watertown – Chenery House at 486 Belmont Street (WAT.135).

A copy of this ENF has been sent to MHC for their review and comment.

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? X Yes \_\_\_\_ No; if yes, does the project involve the destruction of all or any part of such archaeological site? \_\_\_\_ Yes \_\_\_\_ No; if yes, please describe:

According to a letter provided by the Massachusetts Historical Commission (Provided in Attachment B) the following historical resources exist within proximity of the project area:

<u>Belmont</u> – Harvard Lawn (BLM.BU), William P. Hale Estate (BLM.BV) Stults Estate (BLM.BW), Marion Road Streetscape (BLM.CQ), Samuel L. Barnard Estate (BLM.G) Payson Park (BLM.B) Cushing Square (BLM.C) Our Lady of Mercy Roman Catholic Church (BLM.CZ) Waverly Land Company Area (BLM.AF) Waverly Square (BLM.AG) H.F. Campbell Subdivision (BLM.AH) Trapelo Road Streetscape (BLM.CL) and the Palfrey Estate (BLM.H). Watertown – Chenery House at 486 Belmont Street (WAT.135).

D. If you answered "No" to <u>all parts of both</u> questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to <u>any part of either</u> question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

#### II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

A review of project plans, the State and National Registers of Historic Places, and information compiled from the Massachusetts Historical Commission (MHC)'s statewide inventory and site files by MassDOT's Cultural Resources Unit (CRU) staff has revealed that the project limits will pass through several historic districts. The work within the historic districts will generally be confined to the existing roadway right-of-way.

No recorded archaeological sites have been identified in the immediate vicinity of the project area.

CRU staff will evaluate project impacts to National Register-listed or eligible properties within the project's Area of Potential Effect (APE), and will coordinate their review with the MHC under the terms of the amended Section 106 Programmatic Agreement.

#### **III. Consistency**

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

#### **CERTIFICATIONS:**

1	. The Public Notice of Environr newspapers in accordance w		w has been/will be published in the following 11.15(1):
	(Name)		(Date)
2	. This form has been circulated to Ager	ncies and Pe	rsons in accordance with 301 CMR 11.16(2).
Signa	tures:		
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing NPC (if different from above)
Name	e (print or type)	Name (p	print or type)
Firm/#	Agency	Firm/Age	ency
Street	:	Street	
Munic	ipality/State/Zip	Municipa	ality/State/Zip
Phone	9	Phone	

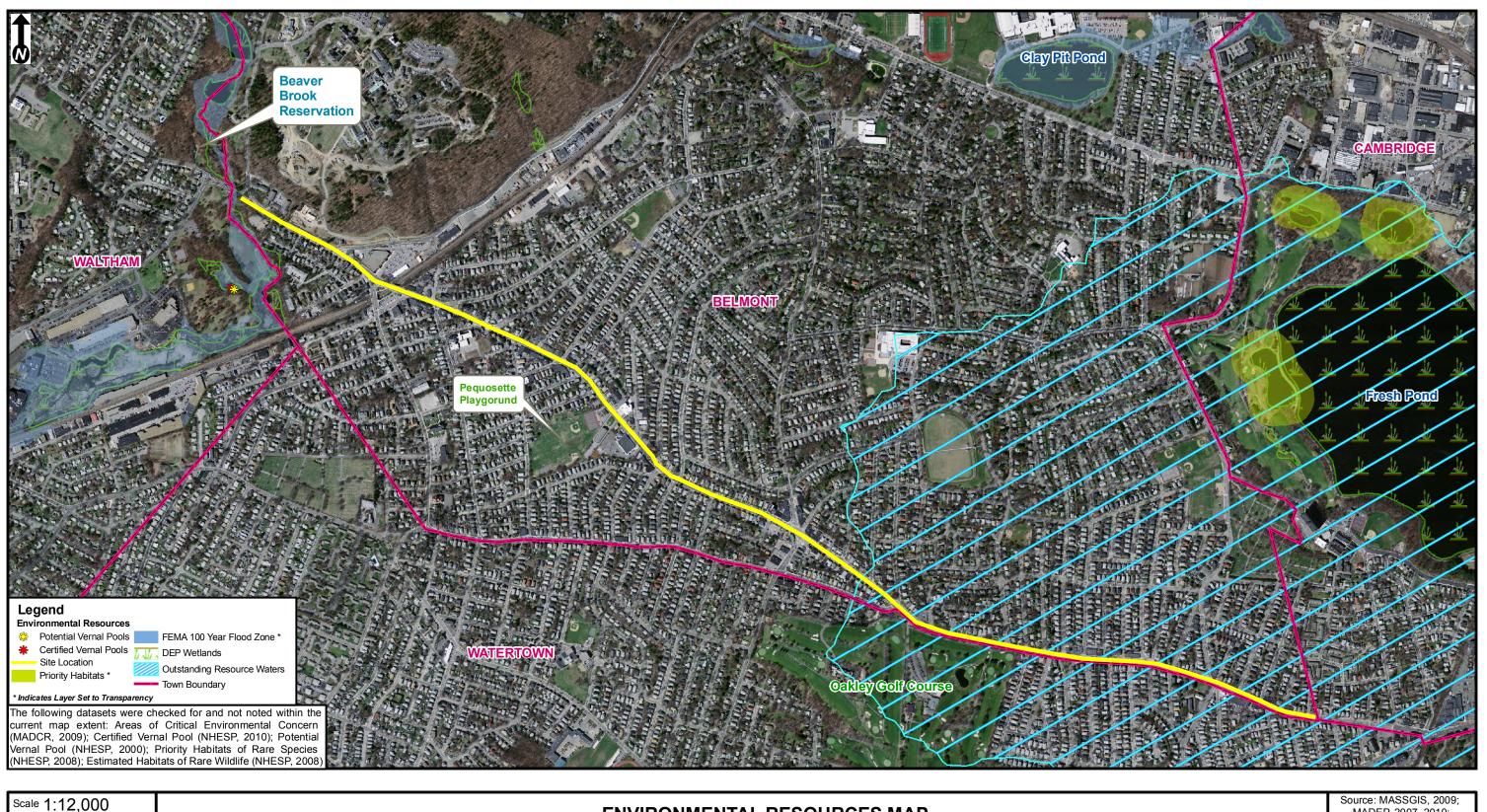
## Attachment A

Trapelo Road and Belmont Street Roadway Improvement Project Environmental Notification Form

SITE FIGURES



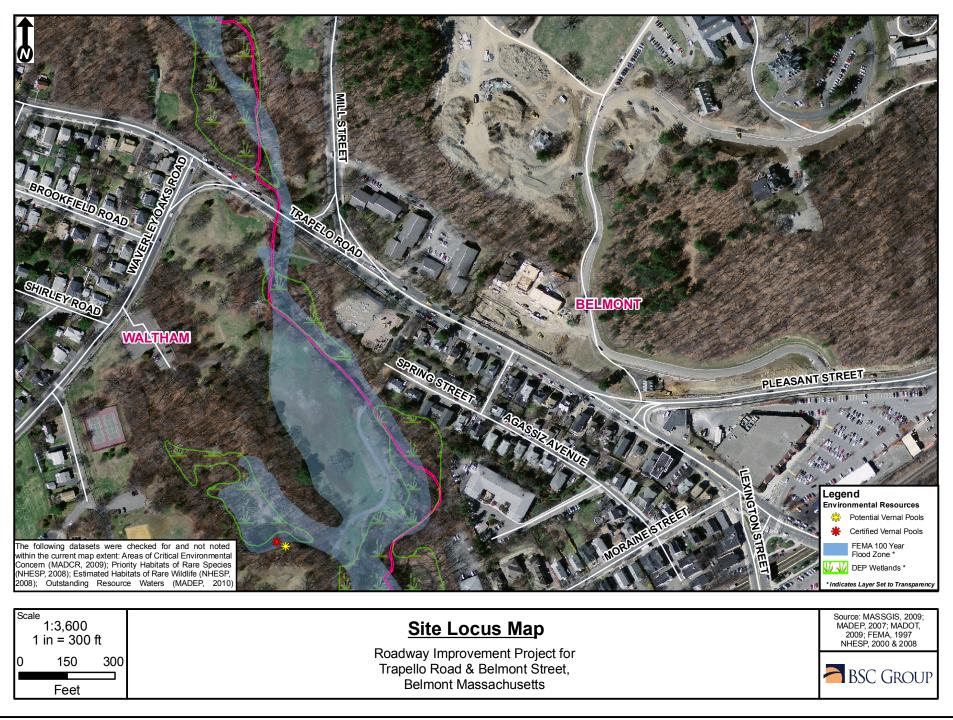




Scale 1:12,000	ENVIRONMENTAL RESOURCES MAP
1 in = 1,000 ft	Roadway Improvement Project for
0 500 1,000	Trapello Road & Belmont Street,
Feet	Belmont Massachusetts

Source: MASSGIS, 2009; MADEP, 2007, 2010; MADOT, 2009; FEMA,1997 NHESP, 2000 & 2008

BSC GROUP



## Attachment B

Trapelo Road and Belmont Street Roadway Improvement Project Environmental Notification Form

CORRESPONDENCE





The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth Massachusetts Historical Commission

July 17, 2007

David Anderson, P.E. Acting Chief Engineer Massachusetts Highway Department 10 Park Plaza Boston, MA 02116 Attention: Geoffrey Fulgione

RE: Trapelo Road – Belmont Street Corridor Improvement Project Belmont, Watertown and Waltham, MA; MHD# 604688, MHC# RC.42464

Dear Mr. Anderson:

Thank you for providing information concerning the 25% design of the above referenced project proposal, which our office received from BSC Group, Inc., on June 28, 2007. Staff of the Massachusetts Historical Commission have reviewed the information and have the following comments.

The project involves reconstruction of 2.6 miles of Trapelo Road and Belmont Street, from a point approximately 600 feet within the City of Waltham in the vicinity of Waverly Oaks Road, through the Town of Belmont and portions of Watertown, to the vicinity of Brimmer Street at the Cambridge City line. Work will involve widening the roadway in two unidentified locations, narrowing the paved section of the roadway in selected areas, reconstructing the sidewalks, repaving the roadway, installing planting strips, planting trees and reconstructing 15 traffic signals. Work within Watertown will be limited to reconstructing the sidewalks and repaving the roadway.

As you may be aware, the project area adjoins numerous properties that are included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth and may be eligible for listing in the National Register of Historic Places (36 CFR 60). These properties are as follows. In Waltham, the project adjoins the property at 53 Trapelo Road (MHC# WLT.289). In Belmont, the project adjoins many properties that are within the following Inventory Areas: Harvard Lawn (BLM.BU), the William P. Hale Estate (BLM.BV), the Stults Estate (BLM.BW), the Marion Road Streetscape (BLM.CQ), the Samuel L. Barnard Estate (BLM.G), Payson Park (BLM.B), Cushing Square (BLM.C), Our Lady of Mercy Roman Catholic Church Complex (BLM.CZ), the Waverley Land Company Area (BLM.AF), Waverley Square (BLM.AG), the H.F. Campbell Subdivision (BLM.AH), the Trapelo Road Streetscape (BLM.CL) and the Palfrey Estate (BLM.H). In Watertown, the project area adjoins the property historically known as the Chenery House at 468 Belmont Street (WAT.135). MHC requests that you please take these historic properties into consideration as the project design progresses.

These comments are offered to assist in meeting the MassHighway Department's 25% Engineering Directive pursuant to Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 71). If you have any questions, please feel free to contact Walter Maros at this office.

Sincerely,

Ann M. Lattinville Director of Architectural Review Massachusetts Historical Commission

xc: Steve Roper, MHD-CRS Belmont Historical Commission Watertown Historical Commission Waltham Historical Commission

> 220 Morrissey Boulevard, Boston, Massachusetts 02125 (617) 727-8470 • Fax: (617) 727-5128



## United States Department of the Interior

FISH AND WILDLIFE SERVICE New England Field Office 70 Commercial Street, Suite 300 Concord, New Hampshire 03301-5087



July 30, 2007

Reference:

Project Road improvements Location Belmont, Watertown, Waltham, MA

Heather Vaillant BSC Group, Inc. 15 Elkins St. Boston, MA 02127

Dear Ms. Vaillant:

This responds to your recent correspondence requesting information on the presence of federallylisted and/or proposed endangered or threatened species in relation to the proposed activity(ies) referenced above.

Based on information currently available to us, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes our review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

In order to curtail the need to contact this office in the future for updated lists of federally-listed or proposed threatened or endangered species and critical habitats, please visit the Endangered Species Consultation page on the New England Field Office's website (www.fws.gov/northeast/newenglandfieldoffice/EndangeredSpec-Consultation.htm). In addition, there is a link to procedures that may allow you to conclude if habitat for a listed species is present in the project area. If no habitat exists, then no federally-listed species are present in the project area and there is no need to contact us for further consultation. If the above conclusion cannot be reached, further consultation with this office is required. A list of information to be provided to us for further informal consultation can be found on the above-referenced site.

Thank you for your coordination. Please contact us at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Authing P. Jan .

Anthony P. Tur Endangered Species Specialist New England Field Office



Commonwealth of Massachusetts

# Division of Fisheries & Wildlife

Wayne F. MacCallum, Director

July 20, 2007

Gregory Sampson BSC Group, Inc 15 Elkins St Boston, MA 02127

RE: Project Location: Town: NHESP Tracking No.

Trapelo Rd/Belmont St Belmont, Watertown, and Waltham 07-22676

To Whom It May Concern:

Thank you for contacting the Natural Heritage and Endangered Species Program ("NHESP") of the MA Division of Fisheries & Wildlife for information regarding state-listed rare species in the vicinity of the above referenced site. We appreciate your initiative in contacting Richard Hartley of the Fisheries department, however, in the future, one information request will suffice, as the NHESP will consult Fisheries on projects where there may be concerns.

Based on the information provided, the NHESP has determined that at this time the site is not mapped as Priority or Estimated Habitat and the NHESP does not have any rare species concerns associated with this site.

This evaluation is based on the most recent information available in the NHESP database, which is constantly being expanded and updated through ongoing research and inventory. If you have any questions regarding this portion of the letter please contact Emily Holt, Endangered Species Review Assistant, at (508) 389-6361.

#### **Fisheries Concerns**

Best management practices for erosion and sedimentation control must be adhered to for all phases of construction to minimize potential impacts to the fisheries resources. All in stream work should be conducted during low flow periods. If the project results in the replacement of existing culverts, the culvert replacement should meet the replacement recommendations found in the "Massachusetts River and Stream Crossing Standards: Technical Guidelines, August 6, 2004" (the Standards) including, a minimum height of 6 feet, openness ratio of 0.5–0.75, natural bottom substrates through the crossing structure, and spanning 1.2 times the bank-full width to the greatest extent practical. If the project results in the placement of new culverts, the new crossing structure should, at minimum, meet the general standards for new crossing and strive for the optimum standards whenever possible including, a minimum height of 6 feet, openness ratio of 0.5–0.75, natural bottom substrates through the crossing structure, and spanning 1.2 times the bank-full width to the greatest extent practical. If the general standards for new crossing and strive for the optimum standards whenever possible including, a minimum height of 6 feet, openness ratio of 0.5–0.75, natural bottom substrates through the crossing structure, and spanning 1.2 times the bank-full width to the greatest extent practical. The Standards can be found at http://www.umass.edu/nrec/pdf\_files/guidelines\_river\_stream\_crossings.pdf. Also, if the project will alter the streambed; we request that the existing grade be maintained.

www.masswildlife.org

Please contact Richard Hartley, Fisheries Biologist, at (508) 389-6330 with any questions regarding this portion of the letter.

Sincerely,

Franch Hornon W.

Thomas W. French, Ph.D. Assistant Director

## Attachment C

Trapelo Road and Belmont Street Roadway Improvement Project Environmental Notification Form

CIRCULATION LIST



## **ENF** Circulation List

#### Secretary Richard K. Sullivan, Jr. (2 copies)

Executive Office of Energy and Environmental Affairs (EEA) Attn: MEPA Office 100 Cambridge Street, Suite 900 Boston, MA 02114

Massachusetts Department of Environmental Protection/ Commissioner's Office One Winter Street Boston, MA 02108

DEP Northeast Region Attn: MEPA Coordinator 205B Lowell Street Wilmington, MA 01887

MassDOT Public Private Development Unit 10 Park Plaza Boston, MA 02116

MassDOT District #4 Attn: MEPA Coordinator 519 Appleton Street Arlington, MA 02476

MassDOT District #6 Attn: MEPA Coordinator 185 Kneeland Street Boston, MA 02111

Massachusetts Historical Commission 220 Morrissey Boulevard Boston, MA 02125

Metropolitan Area Planning Council 60 Temple Place 6<sup>th</sup> Floor Boston, MA 02111

Town of Belmont Board of Selectmen Town Hall 455 Concord Avenue Belmont, MA 02478

Town of Belmont Planning Board Homer Municipal Building 19 Moore Street, Second Floor Belmont, MA 02478 Town of Belmont Conservation Commission Homer Municipal Building 19 Moore Street Belmont, MA 02478

Town of Belmont Department/Board of Health PO Box 56 19 Moore Street Belmont, MA 02478

Watertown Town Council Town Hall 149 Main Street Watertown, MA 02472

Watertown Planning Board Town Hall Administration Building 149 Main Street Watertown, MA 02472

Watertown Conservation Commission Town Hall, 3<sup>rd</sup> Floor 149 Main Street Watertown, MA 02472

Watertown Department/Board of Health Town Hall 149 Main Street Watertown, MA 02472

Division of Conservation and Recreation Attn: MEPA Coordinator 251 Causeway Street, Suite 600 Boston, MA 02114

MWRA Attn: MEPA Coordinator 100 First Avenue Charlestown Navy Yard Boston, MA 02129

MBTA ATTN: MEPA Coordinator 10 Park Plaza, 6<sup>th</sup> Floor Boston, MA 02116

## Attachment D

Trapelo Road and Belmont Street Roadway Improvement Project Environmental Notification Form

SITE PLAN

