



# Request for Determination of Applicability

Under the *Massachusetts Wetland Protection Act*  
(MGL c. 131, s. 40), Implementing Regulations (310 CMR 10.00)  
and the Town of Belmont Wetlands Setback Policy

For:

Belmont Community Path  
Belmont Component of The MCRT (Phase 1)  
**Belmont, MA**

December 17, 2025

Prepared for:

The Town of Belmont  
455 Concord Avenue  
Belmont, MA 02478

Submitted by:

Nitsch Engineering  
2 Center Plaza, Suite 430  
Boston, MA 02108

Nitsch Engineering Project #13548  
MassDOT Project #609204

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**SECTION 1**

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**WPA FORM 1 – REQUEST FOR DETERMINATION OF APPLICABILITY**



Massachusetts Department of Environmental Protection

Bureau of Water Resources - Wetlands

WPA Form 1- Request for Determination of Applicability

Belmont Municipality

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant: Patrice Garvin, 455 Concord Ave, 1st Floor, Belmont, MA 02478, pgarvin@belmont-ma.gov
2. Property Owner (if different from Applicant): MBTA
3. Representative (if any): Matthew Soltys, Nitsch Engineering, 2 Center Plaza, Suite 430, Boston, MA 02108, msoltys@nitscheng.com

B. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request): 726R Pleasant Street; 440, 450 & 460 Concord Avenue, Belmont, MA 02108
b. Area Description (use additional paper, if necessary): MBTA Commuter Rail Line Corridor between Clark Street/ Pleasant Street and Brighton Street
c. Plan and/or Map Reference(s): (use additional paper if necessary) Belmont Community Path - Phase 1; Belmont Component of the MCRT; Construction Plan and Profile, 2025-12-17

How to find Latitude and Longitude

and how to convert to decimal degrees



**B. Project Description (cont.)**

2. a. Activity/Work Description (use additional paper and/or provide plan(s) of Activity, if necessary):

See project narrative

- b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

310 CMR 10.02(2)(b)3

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3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

- b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)
-



**Massachusetts Department of Environmental Protection**  
Bureau of Water Resources - Wetlands

**WPA Form 1- Request for Determination of Applicability** Belmont  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Municipality

**C. Determinations**

1. I request the Town of Belmont make the following determination(s). Check any that apply:  
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced above is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced above are accurately delineated.
- c. whether the **Activities** depicted on plan(s) referenced above is subject to the Wetlands Protection Act and its regulations.
- d. whether the area and/or Activities depicted on plan(s) referenced above is subject to the jurisdiction of any **municipal wetlands' ordinance or bylaw** of:

\_\_\_\_\_  
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for Activities in the Riverfront Area as depicted on referenced plan(s).
- \_\_\_\_\_

**D. Signatures and Submittal Requirements**

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

*Matthew S. [Signature]*  
Signature of Applicant

12-16-2025  
Date

*Matt [Signature]*  
Signature of Representative (if any)

12-16-2025  
Date

**SECTION 2**

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**PROJECT NARRATIVE**

## **PROJECT OVERVIEW**

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On behalf of the Applicant, The Town of Belmont, Nitsch Engineering is seeking a determination on the applicability of the Massachusetts Wetlands Protection Act (MGL c131 s.40) and implementing Regulations (310 CMR 10.00) and the Town of Belmont Wetlands Setback Policy for the proposed Belmont Community Path project located along the Massachusetts Bay Transportation Authority (MBTA) Fitchburg Commuter Rail Line corridor from the Clark Street Pedestrian Bridge to the Brighton Street intersection in the Town of Belmont, Massachusetts. Figure 1 shows the Locus Map and Figure 2 shows the study area.

The Belmont Community Path, a planned segment of the Mass Central Rail Trail (MCRT) through Belmont, will provide a non-motorized link between Waltham and Cambridge access to many neighborhoods and points of interest including schools, parks, MBTA stations, and businesses. The Path will extend the Fitchburg Cutoff which is a shared use path connecting Belmont to Alewife MBTA Station. The multi-use path will provide improved pedestrian and bicycle mobility, accessibility, and safety within the Town of Belmont.

The project consists of approximately 1.1 miles of path that begins at the Clark Street Pedestrian Bridge located between Clark Street and Pleasant Street and ends at the terminus of the Fitchburg Cutoff Bike Path at Brighton Street. The proposed shared use path will be constructed parallel to the MBTA Commuter Rail – Fitchburg Line with an offset to allow maintenance vehicles to still access the tracks.

The path will be ADA-compliant with accessible connections to the existing Clark Street Pedestrian bridge and sidewalk along Pleasant Street. The improvements also include ADA accessible connections at Belmont Station where the path will provide connections to the north side of the platform and the existing sidewalk at Concord Avenue. A new accessible path will be constructed at #7 Channing Road from Channing Road to the Belmont Community Path. The path will also provide an accessible connection to Channing Road and the Belmont High School property at Alexander Avenue via a grade separated crossing. The underpass will allow residents on the north side of the railroad to access Town amenities along Concord Avenue such as the library, park, and the music school. The safety improvements will be incorporated in conjunction with the adjacent at grade railroad crossing. The project will also include safety improvements at the Brighton Street at-grade railroad crossing. Safety enhancements at the existing at-grade railroad crossing at Brighton Street include the installation of traffic calming measures, advanced signage, and advanced warning devices. The enhanced crossing will also include ADA accessibility improvements.

The design will include a paved multi-use path with a typical paved width of 12-feet and a minimum paved width of 10-feet with level shoulders (grass/gravel). Wood timber railing or chain link will line both sides of the Path to limit access to the railroad and private property. The proposed construction will also include the construction of retaining walls, grading to meet existing topography, drainage swales, sub-drains, tree removal, landscape improvements, pavement markings and signage, curbing, and other incidental work. Retaining walls are proposed primarily near Alexander Avenue as the proposed path changes elevation to meet the grade separated crossing under the MBTA tracks. A grass lined swale is proposed along the north side of the path adjacent to Channing Road to capture runoff from the proposed impervious path. This swale consists of a grass channel with a sub-drain below it. The sub-drain is proposed to connect to existing closed drainage systems at Belmont Station, Belmont Middle and High School, and Brighton Street.

The proposed project will include access for maintenance and emergency vehicles to the path and railroad tracks. The design will be coordinated with the MBTA and Keolis with a focus on providing access locations via gates as required where the proposed alignment is located within proximity of the railroad tracks. Coordination will be made with public safety officials regarding their requirements for access to the path and the railroad in the event of an emergency.

## **EXISTING CONDITIONS**

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On November 7, 2019, LEC Environmental Consultants, Inc. (LEC) conducted a site evaluation to identify and characterize existing protectable Wetland Resource Areas on and within 100 feet of the Site and to delineate the outermost wetland resource area boundary in accordance with the Massachusetts Wetlands Protection Act (Act, M.G.L. c. 131, s. 40) and its implementing Regulations. According to LEC wetland resource field delineation findings, Wetland Resource Area associated within 100 ft of the site is limited to Bordering Vegetated Wetland (BVW) located within the western portion of the project site, directly south of the Commuter Rail, north of Royal Road, and west of the Belmont Train Station. Within the eastern portion of the BVW, a meandering excavated stream channel flows southwesterly into standing water located within the BVW's western portion. The western portion of the BVW abuts the southern slope of the rail bed. While this wetland is an isolated feature, it would be regulated as a BVW due to the internal stream channel. LEC delineated the BVW boundary with sequentially numbered, blaze orange surveyor's tape and wire utility flags with the words "LEC Resource Area" or "LEC" printed in black. The BVW flags are numbered 1 through 27.

MassGIS mapping of the various wetland resources on the site were reviewed prior to the site investigation. The wetland map (Figure 3) shows a small area on the western side of project site, west of Belmont Train Station and north of Royal Road as Deciduous Wooded Swamp.

According to the most recent MassGIS data the project is not near certified vernal pools, Priority Habitat or Estimated Habitats of Rare Wetland Wildlife, and Areas of Critical Environmental Concern (ACECs).

According to the most recent FEMA Flood Insurance Rate Map (FIRM) for the area, a section of easterly portion of the project is located within Zone X (Shaded). The remainder of the project is located with Zone X (unshaded). Therefore, none of the project is located with the 100-year floodplain.

Additional Information about the wetland resource areas can be found in LEC's Wetland Delineation Report in Appendix B.

The existing terrain within the majority of the project limits is a compacted gravel railroad right of way. The existing land is primarily used as access roads to the MBTA railroad tracks. The project site and abutting railroad is an elevated embankment surrounding the abutting properties. There is mixed vegetation directly abutting private properties on the north side of the project limits. The existing compacted gravel area within the Project limits will be transformed into a shared use path containing impervious area/seeded areas. Although the Project is increasing impervious area, the existing compacted gravel area does not provide any stormwater treatment and behaves similarly to an impervious area.

**PROPOSED CONDITIONS**

Proposed work west of Belmont Station falls within the 100-foot BVW buffer zone of the wetland. This wetland is located on the south side of the MBTA railroad tracks, north of Royal Road. Proposed work within the 100-foot buffer zone associated with the identified wetland includes the construction of a 12-foot paved shared use path, construction of gravel/wetland shoulders adjacent to the shared use path, installation of proposed fencing and railing, tree/vegetation removal, loam and seed restoration, and grading on both sides of the path. The loam and seed restoration on both sides of the path is pervious which will allow rainwater and runoff infiltration. Only 2 inches of stormwater are anticipated based on a 25-year storm, so pooling is unlikely in this restoration area. Construction plans showing proposed work within the 100-foot BVW buffer and erosion control details can be found in Appendix A.

All proposed work is located outside the 25-foot Buffer Zone to BVW, as regulated by the Belmont Wetlands Setback Policy. The closest work is 55 feet from the BVW.

All proposed work as part of the project is located on the north side of the MBTA railroad tracks. The railroad tracks are raised above the adjacent ground on the north/south with a vertical separation barrier from the wetland located on the south side of the railroad.

A soil erosion and sediment control plan will be implemented before the start of construction operations and removed following construction and site stabilization.

See Table 1 below for a summary of work within the 100-foot buffer zone.

<b>Table 1: Summary of work within the 100-foot buffer zone to BVW</b>	
<ul style="list-style-type: none"> <li>• Construction of a 12-foot-wide hot mix asphalt shared-path with a 2-foot-wide unpaved shoulder on the south side and a 4-foot-wide unpaved shoulder on the north side of the path.</li> <li>• Grading on both sides with loam and seed of the shoulder to meet existing topography. Runoff is pitched toward the MBTA tracks which mimics the existing condition.</li> <li>• Installation of timber railing and chain link fence on both sides of the path.</li> <li>• Removal of 7 trees that are in conflict with the path alignment which will be replaced with a steep slope seed mix.</li> <li>• Within the 100-foot buffer zone, a 10,000 sq. ft. area of existing degraded gravel adjacent to the MBTA commuter rail tracks is to be disturbed. See Table 2.</li> </ul>	

Table 2 below summarizes the impact areas for the proposed buffer zone area, including additional impervious area added within the 100-foot buffer zone to BVW.

<b>Table 2: Area Summary – Belmont Community Path within 100-foot Buffer to BVW</b>	
Total Buffer Zone Impact Area (Square Feet)	10,000 SF
Change in Impervious Area Within Buffer	+3,800 SF Impervious

Design plans are provided in Appendix A. Figure 4 shows the GIS wetland data layers for the intersection. A soil erosion and sediment control plan will be implemented before the start of construction operations and removed following construction and site stabilization.

In summary, although the proposed construction activities will occur within the 100-foot buffer zone of the BVW, the proposed work effort will not result in any direct impacts to the resource areas. Additionally, the proposed work is separated from the BVW by the existing MBTA railroad. We respectfully request that the Belmont Conservation Commission issue a Negative Determination.

## **OTHER ENVIRONMENTAL CONSIDERATIONS**

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### FEMA Flood Zone

According to the FEMA Flood Insurance Rate Map for the area date June 4, 2010 (Map Number 25017C0418E), a portion of the easterly limits of the project is located within Zone X (Shaded)– 0.2% annual chance of flood with no elevation. The remainder of the site is located within Zone X (Unshaded) – Areas determined to be outside the 0.2% annual chance of floodplain. Therefore, no portion of the project is located within the 100-year floodplain. (Figure 4 – FEMA Flood, NHESP, ACECs).

### NHESP Priority and Estimate Habitat

According to the most recent GIS data, there is no Priority Habitat or Estimated Habitats of Rare Wetland Wildlife on the site or within the immediate vicinity (Figure 4 – FEMA Flood, NHESP, ACECs).

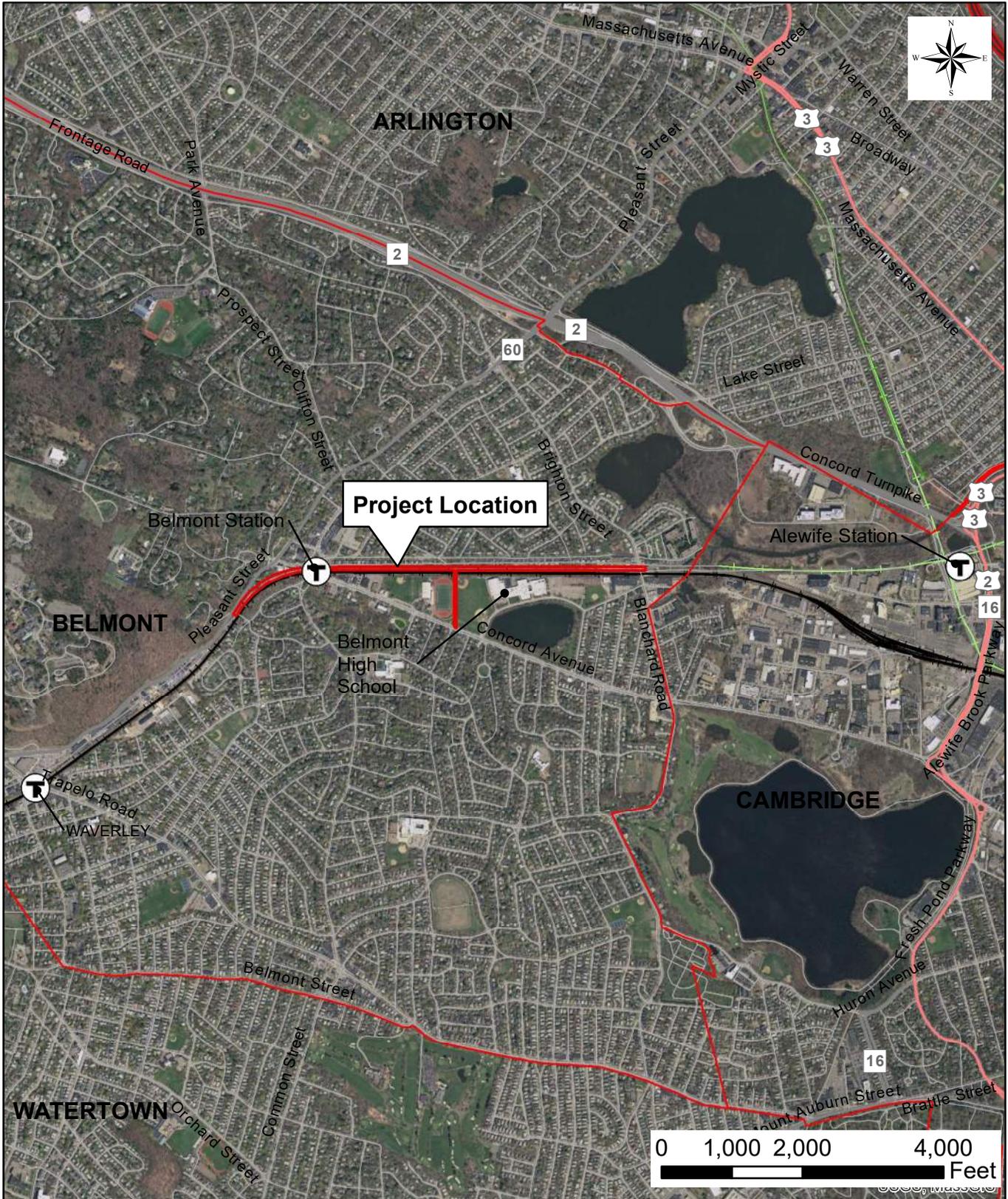
### Certified and Potential Vernal Pools

According to the most recent MassGIS data, no streams, potential or certified vernal pools or Estimated Habitat of Rare Wildlife and Priority Habitats or Rare Species were present on the site. (Figure 4 – FEMA Flood, NHESP, ACECs).

**FIGURES**

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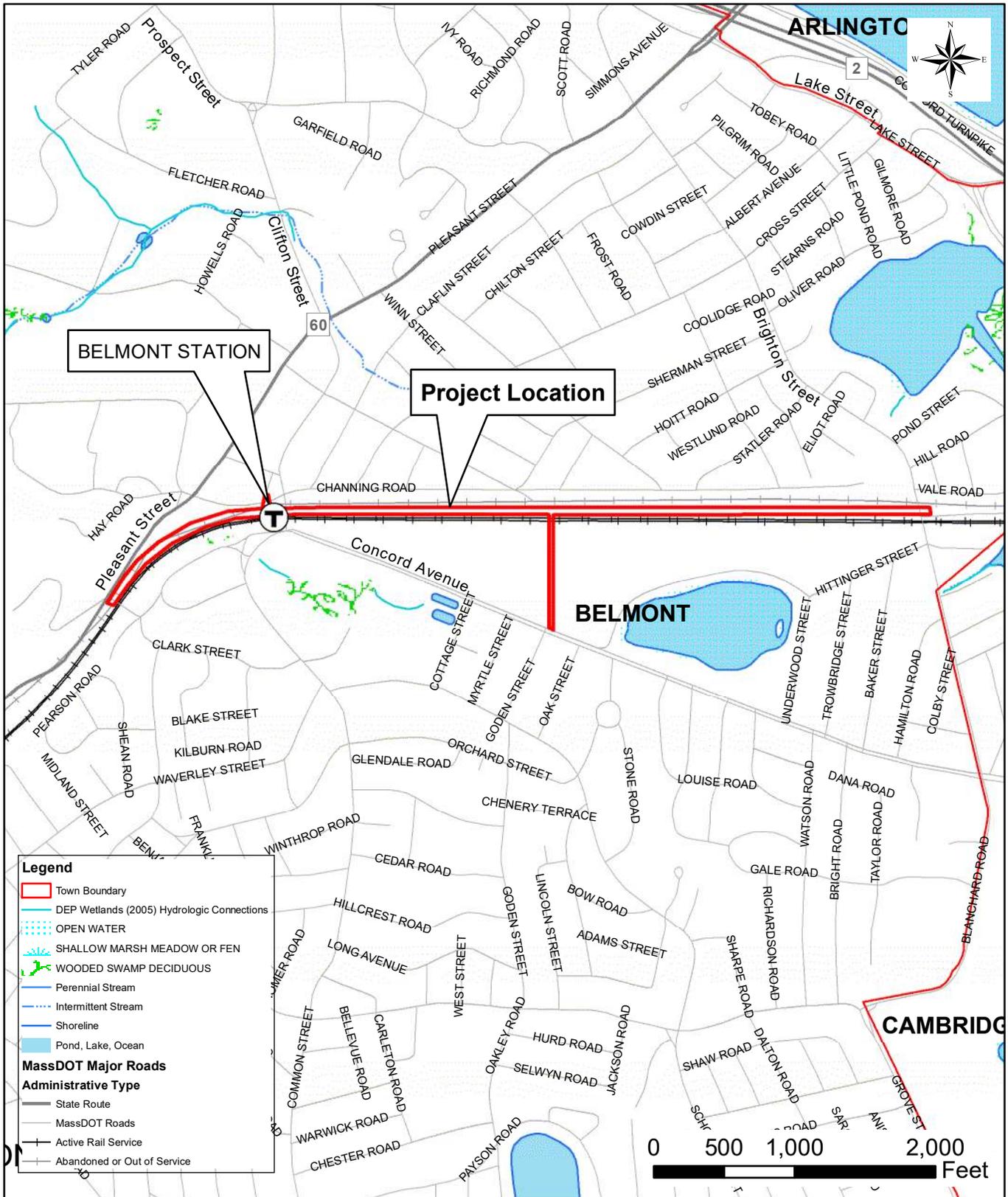
Figure 1	Locus Map
Figure 2	Study Area
Figure 3	Wetlands Map
Figure 4	FEMA Flood, NHESP, ACECs
Figure 5	Existing Conditions Photos



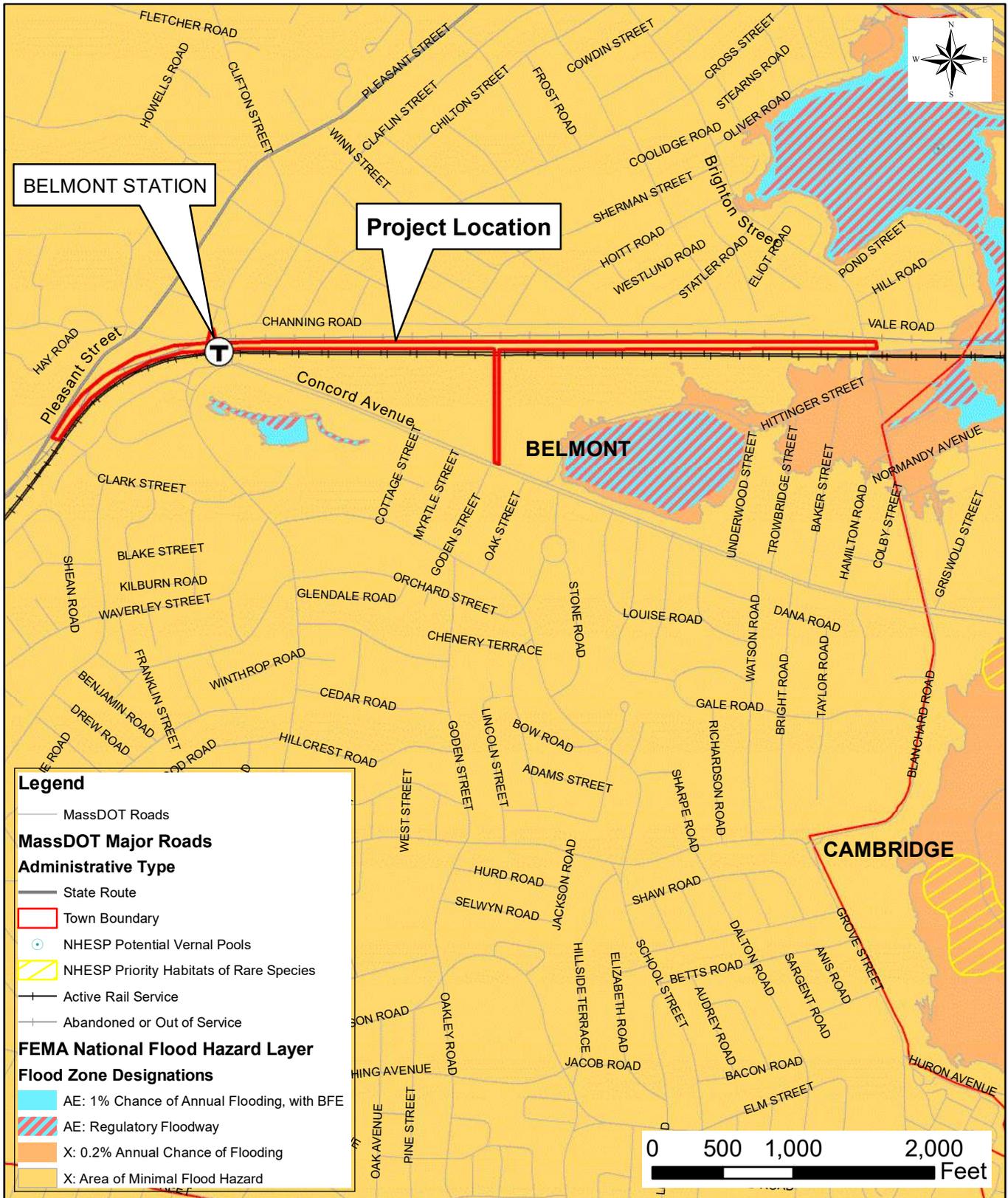
**Figure 1- Locus Map**  
 Belmont Community Path  
 Belmont Component of The MCRT (Phase 1)  
 Belmont, Massachusetts



**Figure 2- Study Area**  
 Belmont Community Path  
 Belmont Component of The MCRT (Phase 1)  
 Belmont, Massachusetts



**Figure 3 - Wetlands**  
 Belmont Community Path  
 Belmont Component of The MCRT (Phase 1)  
 Belmont, Massachusetts



**Figure 4 - NHESP, ACEC, FEMA Flood Belmont Community Path Belmont Component of The MCRT (Phase 1) Belmont, Massachusetts**

**Project Photos:**

**Belmont Community Path :**



**Belmont Community Path Looking East near Pleasant Street**



**Belmont Community Path Looking West near Channing Road**



**Belmont Community Path Looking West near Alexander Avenue**



**Belmont Community Path Looking East at 40 Brighton Street**



**Belmont Station Looking West**



**Belmont Community Path Looking West near #7 Channing Road**

**APPENDIX A**

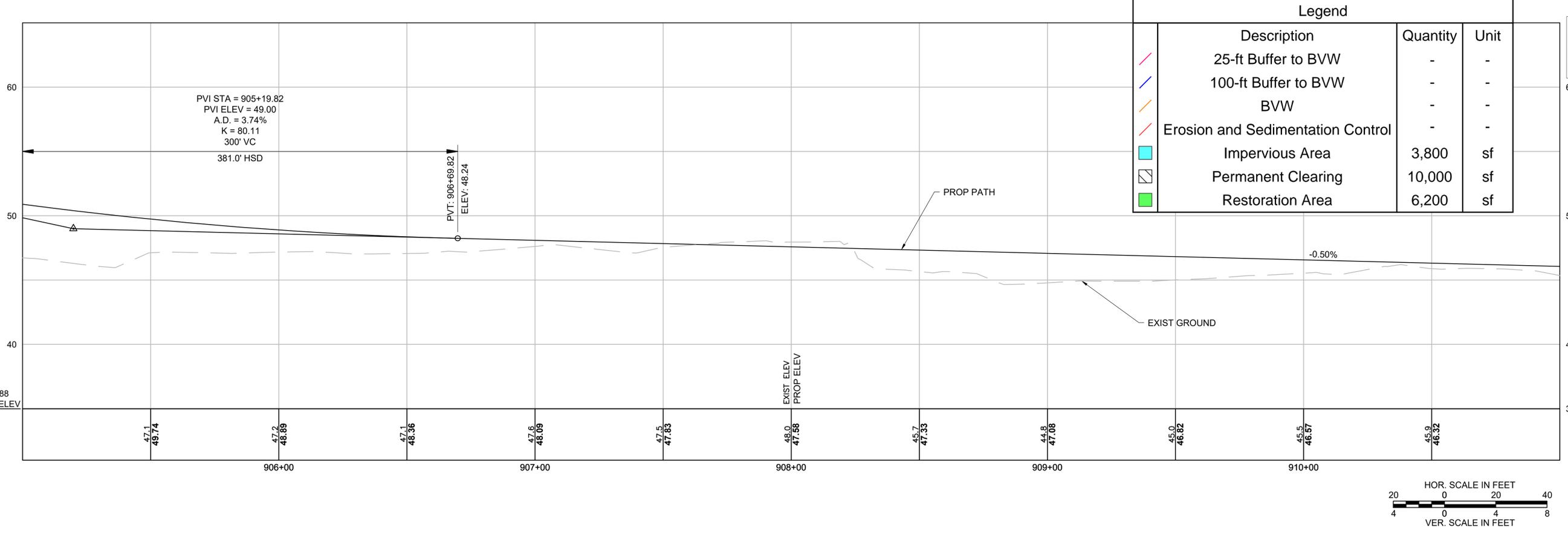
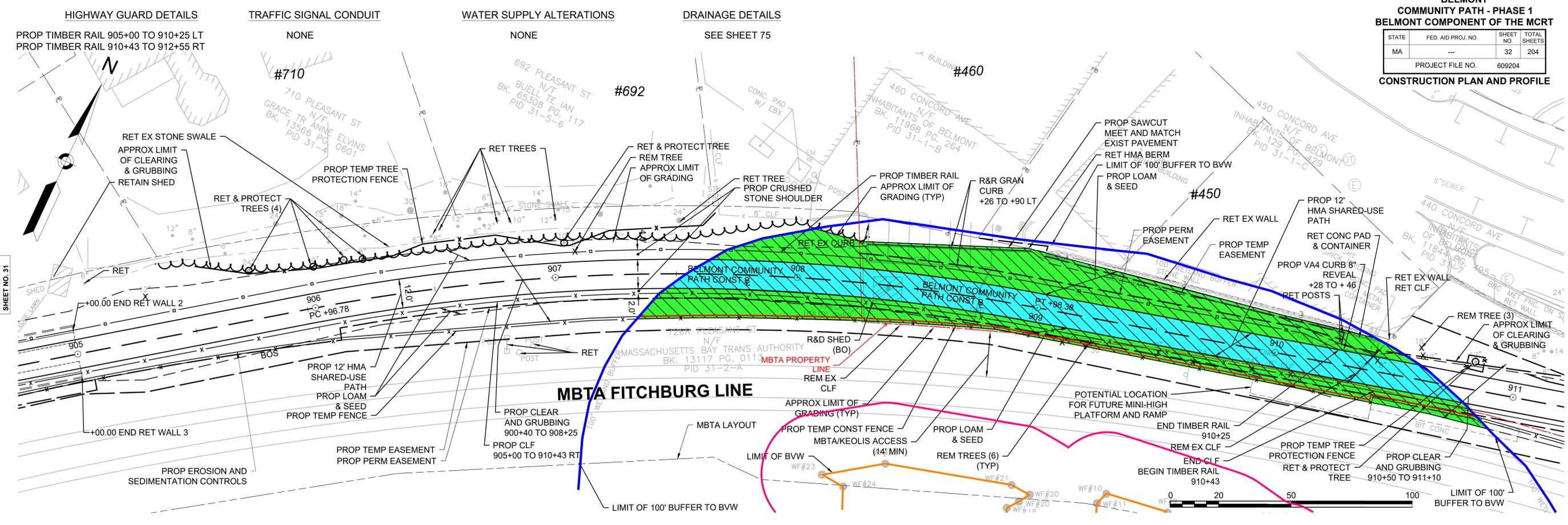
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**DESIGN PLANS**

**BELMONT  
COMMUNITY PATH - PHASE 1  
BELMONT COMPONENT OF THE MCRT**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	---	32	204

PROJECT FILE NO. 609204  
**CONSTRUCTION PLAN AND PROFILE**



Nitsch - P:\10000-14999\13548 BelmontCompPath\Transportation\CAD\609204\_HD(CONST-view).dwg

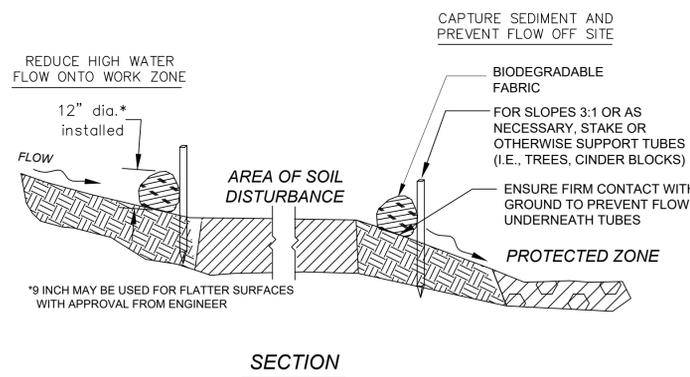
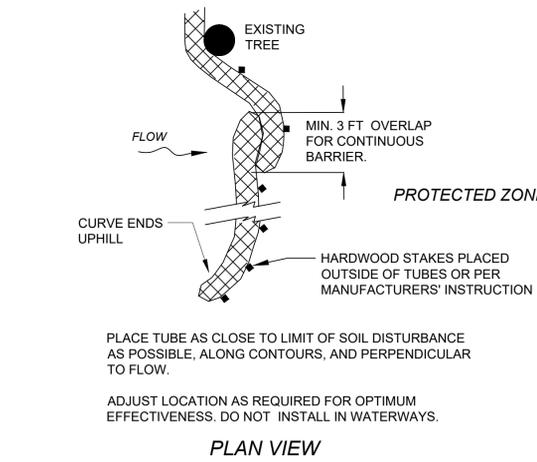
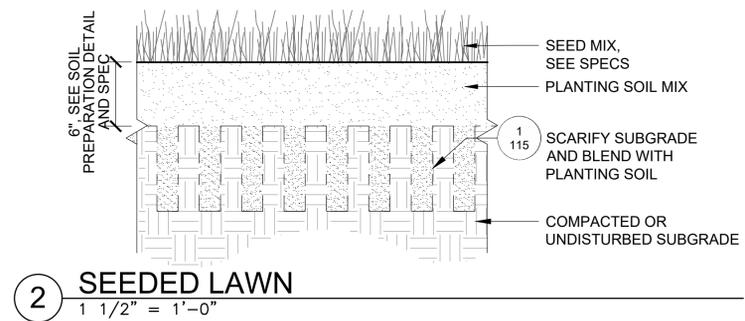
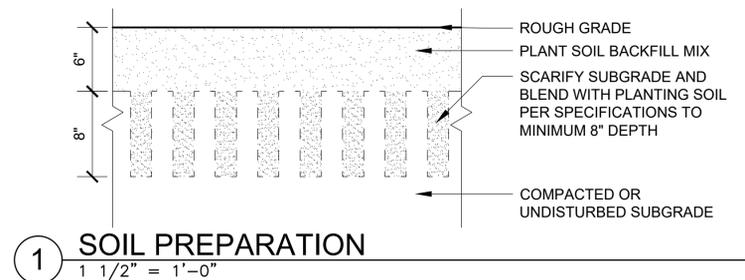
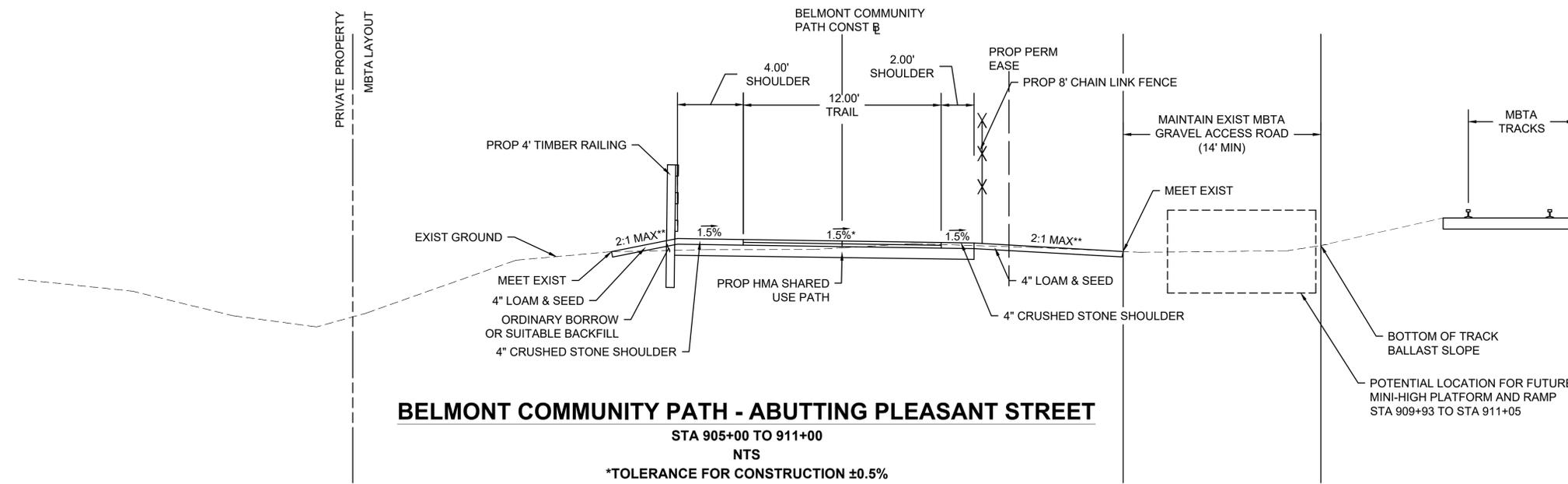
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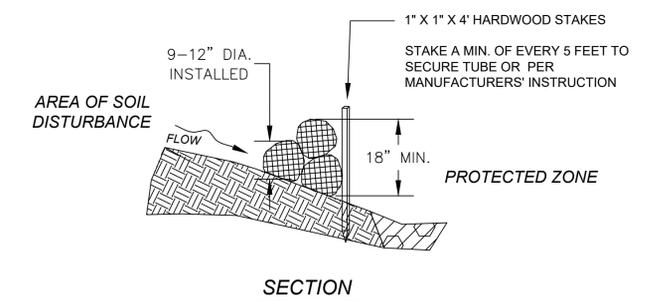
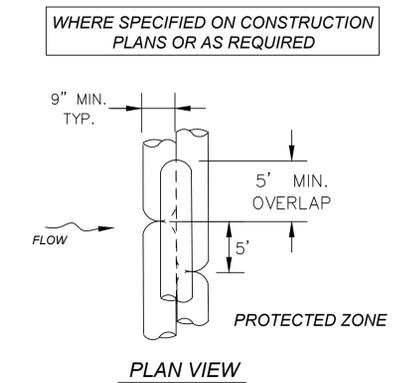
**BELMONT  
COMMUNITY PATH - PHASE 1  
BELMONT COMPONENT OF THE MCRT**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	---	117	204

**CONSTRUCTION DETAILS  
AND TYPICAL SECTION**



**SEDIMENT BARRIER - COMPOST FILTER TUBE**  
NOT TO SCALE



**COMPOST FILTER TUBES STACKED**  
NOT TO SCALE

**APPENDIX B**

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**LEC WETLAND DELINEATION REPORT**

December 17, 2019

**Email** (jmichalak@nitscheng.com)

Mr. John Michalak  
Nitsch Engineering  
120 Front Street, Suite 820  
Worcester, MA 01608

**Re: Wetland Resource Area Analysis Report  
Belmont Community Path  
Assessor's Parcel ID: F4-2  
Belmont, Massachusetts**

[LEC File #: NEI\19-181.04]

Dear Mr. Michalak:

Pursuant to your request, LEC Environmental Consultants, Inc., (LEC) conducted a site evaluation and Wetland Resource Area boundary determination along and within 100 feet of the proposed Belmont Community Path generally located within the MBTA Fitchburg Line Commuter Rail corridor from the Clark Street Pedestrian Bridge to Brighton Street within Belmont, Massachusetts. Our site evaluation was conducted in accordance with the *Massachusetts Wetlands Protection Act* (Act, M.G.L. c. 131, s. 40) and its implementing Regulations (*Act Regulations*, 310 CMR 10.00, and the criteria provided in *Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act* (March 1995) and *Field Indicators for Identifying Hydric Soils in New England* (Version 4, May 2018, *Field Indicators Guide*). The Town of Belmont does not administer a Wetlands Protection Bylaw. The following report provides a general site description, wetland delineation methodology, and a description of the Wetland Resource Areas and potential regulatory implications.

### General Site Description

The 1.1± mile Project Area (Site) generally occurs along the MBTA Fitchburg Commuter Rail Line corridor from the Clark Street Pedestrian Bridge to the Brighton Street intersection. A portion of the Site also extends through the central portion of Belmont High School's athletic fields (attached, Figures 1 and 2). Residential and commercial development generally occur north and south of the Site. Undeveloped forested land containing uplands and wetlands is located south of the Site, east of the Clark Street Pedestrian Bridge, north of Royal Road, and west of the Belmont Train Station. The Site includes raised portions of the railroad bed with slopes descending north and south into flat areas along the tracks. Topography within the Belmont High School Property is generally flat.



Photo 1. Easterly view within the forested upland.

Vegetation within the western off-site and on-site forested upland (Photo 1) includes a canopy dominated by Norway maple (*Acer platanoides*), and scattered individuals of individuals of American elm (*Ulmus americana*). The understory contains patches of sapling cherry (*Prunus* sp.), with individuals of sapling catalpa (*Catalpa speciosa*), glossy buckthorn (*Frangula alnus*), tatarian honeysuckle (*Lonicera tatarica*), apple (*Malus* sp.), multiflora rose (*Rosa multiflora*), and oriental bittersweet (*Celastrus orbiculatus*).

Groundcover is dominated by Japanese knotweed (*Polygonum cuspidatum*), scattered patches of garlic mustard (*Alliaria petiolata*), and scattered individuals of night shade (*Solanum* sp.), and celandine (*Chelidonium majus*).

LEC inspected soil conditions within the forested upland proximate to the Bordering Vegetated Wetland (BVW) boundary and observed a gravelly loamy sand fill layer (A<sup>h</sup> horizon) measuring 22 inches thick and with a soil matrix color of 10YR 3/1. No redoximorphic features were observed throughout the soil profile. While this soil profile meets the HTM-A Indicator for a hydric soil within *the Field Indicators Guide*, the area lacks a preponderance of wetland vegetation and therefore is considered an upland in accordance with the *Act Regulations*.

### Natural Heritage and Endangered Species Program (NHESP) Designation

According to the 14<sup>th</sup> Edition (August 1, 2017) of the Natural Heritage Endangered Species Program (NHESP) *Massachusetts Natural Heritage Atlas*, the Site is not located within *Estimated Habitat of Rare Species* or *Priority Habitat of Rare Species*. In addition, there are no mapped certified or potential vernal pools on or in proximity to the Site.

### Floodplain Designation

According to the June 4, 2010 *Federal Emergency Management Agency Flood Insurance Rate Maps* for Middlesex County, Massachusetts (Map Number: 25017C0418E), the eastern portion of the Site proximate to Brighton Street is located within Zone X [shaded]: *Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood*. The remainder of the Site is located within Zone X [unshaded]: *Areas determined to be outside the 0.2% annual chance floodplain*. As such, no portion of the Site is located within the 100-year floodplain (attached, Figure 3).

## Wetland Boundary Determination

On November 7, 2019, LEC conducted a site evaluation to identify and characterize existing protectable Wetland Resource Areas on and within 100 feet of the Site and to delineate the outermost wetland resource area boundary (i.e., BVW). The extent of Wetland Resource Areas was determined through observations of existing plant communities, hydrologic indicators, and bankfull indicators in accordance with the *Act* and the *Act Regulations*.

Portions of the Site along the Commuter Rail corridor were inaccessible; however, LEC conducted Wetland Resource Area evaluations at the rail crossings at Leonard Street, Clark Street Pedestrian Bridge, south of the terminus of Alexander Avenue, and proximate to Brighton Street. The Belmont High School property was inaccessible due to construction activities.

Based on our observations, LEC determined that the Wetland Resource Area associated with the Site is limited to BVW located within the western portion of the Site. LEC delineated the BVW boundary with sequentially numbered, blaze orange surveyor's tape and wire utility flags with the words "LEC Resource Area" or "LEC" printed in black. The BVW flags are numbered 1 through 27.

A brief description of the Wetland Resource Area is provided below.

## Bordering Vegetated Wetland

According to 310 CMR 10.55(2) Bordering Vegetated Wetlands are defined as: *freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes...Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants...The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.*



Photo 2. A westerly view of the stream channel within the eastern portion of BVW.

A BVW occurs within the western portion of the Site, directly south of the Commuter Rail, north of Royal Road, and west of the Belmont Train Station. The human-altered BVW contains areas that have been historically filled or excavated. The BVW generally occurs along an abrupt break in topography, consisting of a fill slope or along a stone retaining wall. Within the eastern portion of the BVW, a meandering excavated stream channel flows southwesterly (Photo 2) into standing water located within the BVW's western portion. The



western portion of the BVW abuts the southern slope of the rail bed. While this wetland is an isolated feature, it would be regulated as a Bordering Vegetated Wetland due to the internal stream channel. Vegetation within the BVW includes a sparse canopy of individual American elm and red maple (*Acer rubrum*). While the understory is absent, the ground cover consists of a narrow band of Japanese knotweed located along the BVW boundary.

LEC inspected soil conditions within the BVW and observed an 11-inch thick mucky, gravelly loamy sand fill layer (A<sup>h</sup> horizon) with a soil matrix color of 10YR 3/1. Refusal in the form of compacted gravel was generally encountered at 11 inches. This soil meets the HTM-A indicator and is considered hydric in accordance with the *Field Indicators Guide*.

### Summary

LEC conducted a site evaluation and wetland delineation on November 7, 2019 to determine the extent of Wetland Resource Areas subject to jurisdiction under the *Act* and its implementing *Regulations*. Based on our site evaluation and review of pertinent maps, LEC determined that the Wetland Resource Area located on or within 100 feet of the Site is limited to BVW. Any work proposed within the BVW and/or its 100-foot Buffer Zone will require compliance with performance standards enumerated in the *Act Regulations* and filing for the appropriate permits with the Town of Belmont Conservation Commission and/or the Massachusetts Department of Environmental Protection, and may require additional wetlands permitting depending on the extent and scope of work.

Thank you for the opportunity to provide these services. Should you have any questions or require additional information, do not hesitate to contact me in our Worcester office at 508-753-3077 or at akendall@lecenvironmental.com.

Sincerely,

**LEC Environmental Consultants, Inc.**

Andrea Kendall  
Senior Environmental Scientist

Julia Hoozeboom  
Wetland Specialist

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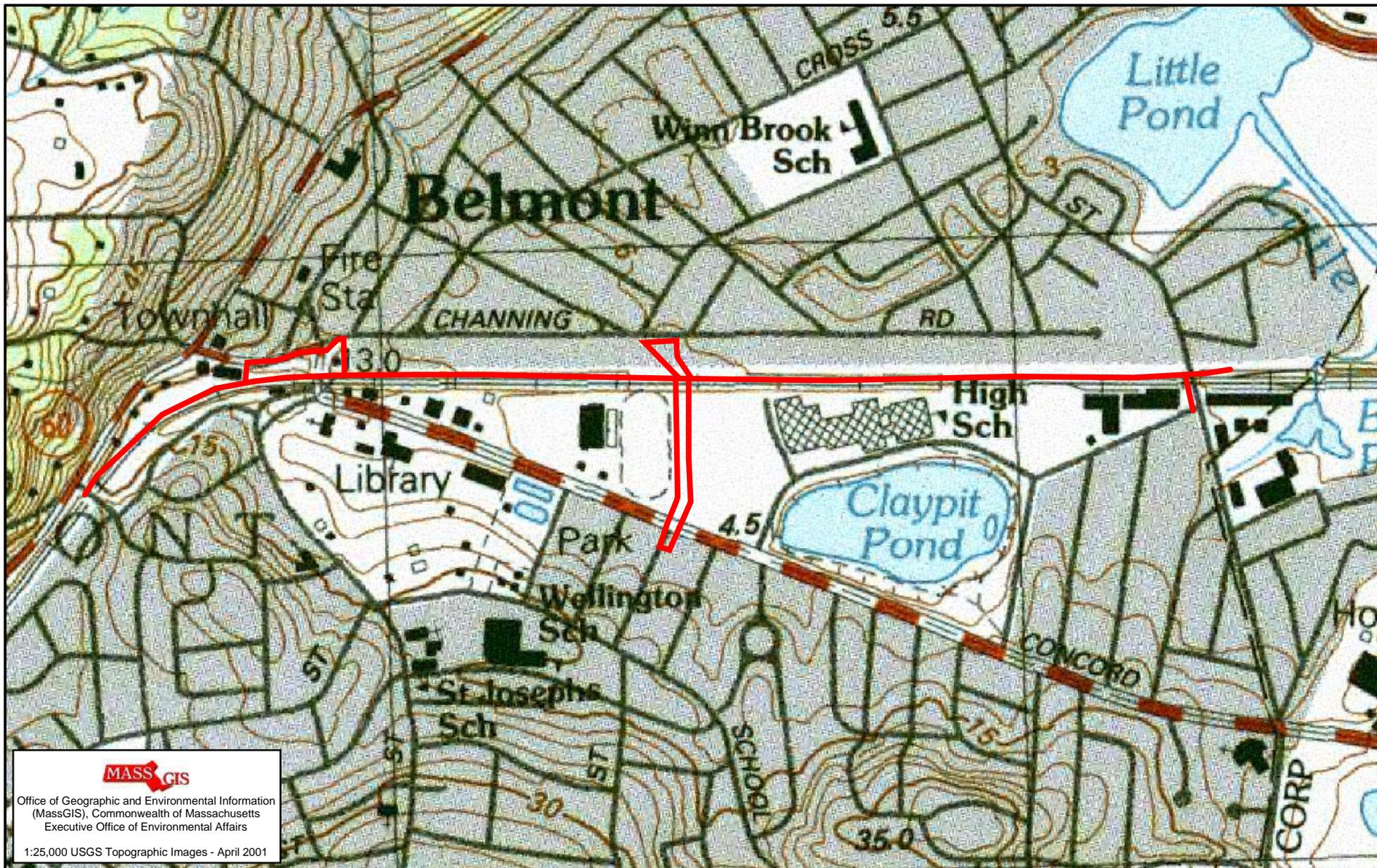
alk: projects\19-181 NEI WRAA

## **Attachments**

Figure 1: USGS Topographic Map

Figure 2: USGS Color Ortho Imagery with NHESP Estimated & Priority Habitats

Figure 3: FEMA Flood Insurance Rate Map

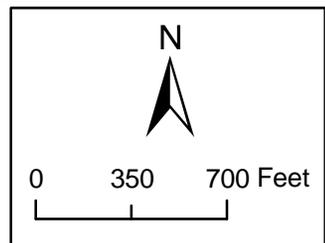


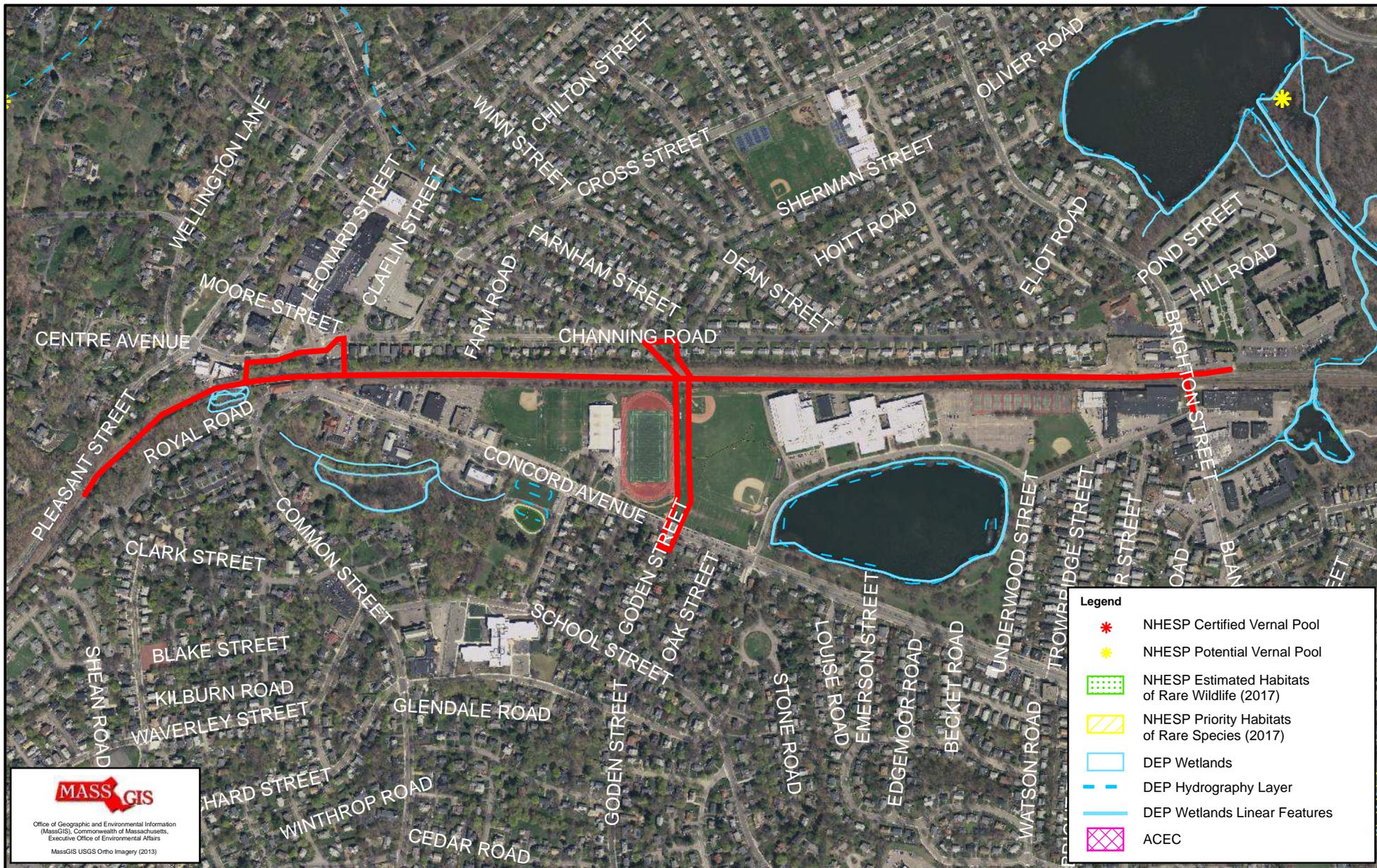
  
 Office of Geographic and Environmental Information  
 (MassGIS), Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs  
 1:25,000 USGS Topographic Images - April 2001

  
 Environmental Consultants, Inc.  
 Wakefield, MA  
 781.245.2500  
[www.lecenvironmental.com](http://www.lecenvironmental.com)

Figure 1: USGS Topographic Map  
 Belmont Community Path  
 Belmont, MA

December 17, 2019





**LEC**

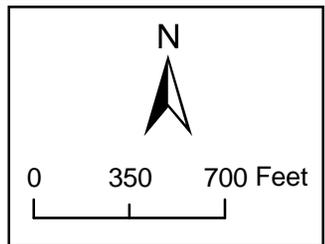
Environmental Consultants, Inc.  
 Wakefield, MA  
 781.245.2500

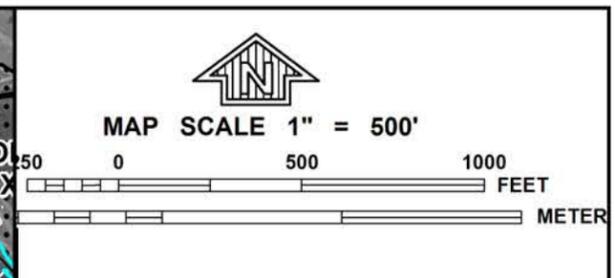
www.lecenvironmental.com

Figure 2: USGS Color Ortho Imagery & NHPSP Map  
 Belmont Community Path  
 Belmont, MA

Superceded map.  
 See page 17

December 17, 2019





Town of Belmont  
250182

PANEL 0418E

**NFIP**

**FIRM**  
FLOOD INSURANCE RATE MAP

MIDDLESEX COUNTY,  
MASSACHUSETTS  
(ALL JURISDICTIONS)

PANEL 418 OF 656  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ARLINGTON, TOWN OF	250177	0418	E
BELMONT, TOWN OF	250182	0418	E
CAMBRIDGE, CITY OF	250186	0418	E
WATERTOWN, TOWN OF	250223	0418	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER  
25017C0418E

EFFECTIVE DATE  
JUNE 4, 2010

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

Figure 3: FEMA Flood Insurance Rate Map

# LEGEND



**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

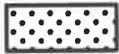
The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.



**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.



**OTHER FLOOD AREAS**

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.



**OTHER AREAS**

- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.



**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**



**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.



1% annual chance floodplain boundary



0.2% annual chance floodplain boundary



Floodway boundary



Zone D boundary



CBRS and OPA boundary



Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.



513

Base Flood Elevation line and value; elevation in feet\*

(EL 987)

Base Flood Elevation value where uniform within zone; elevation in feet\*

\* Referenced to the North American Vertical Datum of 1988



Cross section line



Transect line

87°07'45", 32°22'30"

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

2476<sup>000</sup>mN

1000-meter Universal Transverse Mercator grid values, zone 19

600000 FT

5000-foot grid values: Massachusetts State Plane coordinate system, Mainland zone (FIPZONE 2001), Lambert Conformal Conic projection

DX5510 x

Bench mark (see explanation in Notes to Users section of this FIRM panel)

● M1.5

River Mile

MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE  
FLOOD INSURANCE RATE MAP  
June 4, 2010

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL