

NOTICE OF PUBLIC MEETING SUDBURY CONSERVATION COMMISSION

The Sudbury Conservation Commission will hold a public meeting to review the Request for Determination of Applicability filing, under the Wetlands Protection Act and Town Wetlands Bylaw, for roadway improvements to the intersection of Old Lancaster Road, Concord Road and Union Avenue, Sudbury, MA. Town of Sudbury, Department of Public Works, Applicant. The meeting will be held on Monday, March 14, 2022, at 6:45 pm, via remote participation.

Copies of the application may be reviewed at the Conservation Department web page at:

https://sudbury.ma.us/conservationcommission/meeting/conservation-commissionmeeting-monday-march-14-2022/

SUDBURY CONSERVATION COMMISSION February 16, 2022



February 14, 2022

David Henkels, Chair Sudbury Conservation Commission 275 Old Lancaster Road Sudbury, MA 01776

Re: Request for Determination of Applicability Complete Streets Intersection Improvements Old Lancaster Road, Concord Road, and Union Avenue

Dear Mr. Henkels and Commissioners:

On behalf of the Town of Sudbury Department of Public Works (DPW), BETA Group, Inc. (BETA) respectfully submits this Request for Determination of Applicability (RDA) for proposed roadway improvements (the Project) at the intersection of Old Lancaster Road, Concord Road and Union Avenue in central Sudbury, MA (the Site). The Project is being funded through a Complete Streets Intersection Improvement Grant and is a component of a larger roadway improvement program within the Town of Sudbury. Work proposed at the Site will generally include the realignment of the intersection of Union Avenue and Concord Road; full-depth pavement reclamation; installation of vertical granite curbing; construction of cement concrete sidewalks and ramps; installation of new signage and rectangular rapid-flashing beacons (RRFBs); trimming of existing vegetation to improve sight distance and signage visibility; installation of one (1) new deep-sump catch basin; and the resetting of one (1) existing catch basin. The Project is anticipated to improve the Site's compliance with the Americans with Disabilities Act (ADA) design standards.

The Project will occur within Areas Subject to Protection and/or Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its Regulations at 310 CMR 10.00 (the Act) and the Town of Sudbury Wetlands Protection Bylaw (Article XXII) and its Regulations (the Bylaw) including the 100-foot Buffer Zone and 100-foot Adjacent Upland Resource Area (AURA) associated with Bank to an intermittent stream channel. A majority of the proposed work meets the criteria for minor/exempt activities under the Act set forth by 310 CMR 10.02(2). These minor activities and the remainder of the proposed work, as detailed further in the attached narrative, will occur within the previously developed rights-of-way and are not anticipated to adversely impact Bank, Land Under Water, or the AURA.

This RDA has been concurrently submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office. As a municipal entity, the DPW is exempt from state and local filing fees.

We trust that the following application provides adequate information to facilitate the issuance of a Negative Determination stating that the filing of a Notice of Intent is not required under the Act or the Bylaw.

David Henkels, Chair February 14, 2022 Page 2 of 2

Should you have any additional questions, please do not hesitate to contact us.

Very truly yours, **BETA Group, Inc.**

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Jonathan Niro Environmental Scientist

Willia PM

William P. McGrath, P.E. Vice President

cc: MassDEP NERO, Division of Wetlands

Job No: 21.10060.00



Complete Streets Intersection Improvements

Concord Road, Union Avenue, and Old Lancaster Road Intersection February 2022

REQUEST FOR DETERMINATION OF APPLICABILITY



89 Shrewsbury Street www.BETA-Inc.com

Complete Streets Intersection Improvements

Sudbury, MA Concord Road, Union Avenue, and Old Lancaster Road Intersection

REQUEST FOR DETERMINATION OF APPLICABILITY

Prepared by: BETA GROUP, INC.

Prepared for: Town of Sudbury Department of Public Works

February 2022

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WPA FORM 1 - REQUEST FOR DETERMINATION OF APPLICABILITY





Important.

Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 1- Product for Determination of Ar

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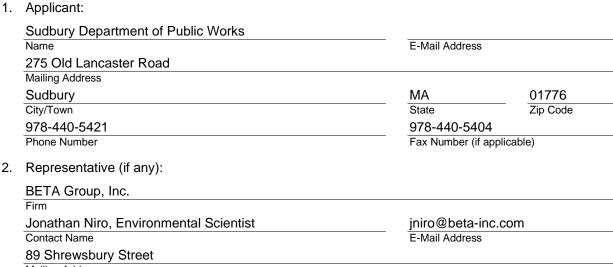
Zip Code

WPA Form 1- Request for Determination of Applicability

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

A. General Information

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



Mailing Address Worcester

City/Town 774-573-9694 Phone Number

B. Determinations

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

MA

State

N/A

Fax Number (if applicable)

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below 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 below are accurately delineated.
- C. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Sudbury
Name of Municipality

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



FAIOTH I- Request for Determination of Application

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

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

Concord Road, Union Avenue, and Old Lancaster	Sudbury
Road Intersection	City/Town
N/A - Roadway	N/A - Roadwa
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

The Site consists of the intersection of Concord Road, Old Lancaster Road and Union Avenue. Existing improvements at the Site generally consist of bituminous roadways, utility poles, bituminous sidewalks, and stormwater management infrastructure. See Narrative for additional information.

c. Plan and/or Map Reference(s):

Complete Streets Intersection Improvements Request for Determination of Applicability Plan	2/14/2022 Date	
Title	Date	
Title	Date	

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

Work proposed at the Site will generally include the realignment of the intersection of Union Avenue and Concord Road; mill and overlay of pavement; installation of vertical granite curbing; construction of cement concrete sidewalks and ramps; installation of new signage and rectangular rapid-flashing beacons (RRFBs); installation of one (1) new deep-sump catch basin; and the resetting of one (1) existing catch basin. See Narrative for additonal information.



Sudbury City/Town

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

C. Project Description (cont.)

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)(f) - Conversion of impervious surface to vegetated surface 310 CMR 10.02(2)(n)(iv) - Vegetation cutting for road safety and maintenance 310 CMR 10.02(4) - Work on stormwater management systems.

- 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.)



Sudbury City/Town

WPA Form 1- Request for Determination of Applicability

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

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.

Name and address of the property owner:

The Town of Sudbury	
Name	
322 Concord Road	
Mailing Address	
Sudbury	
City/Town	
MA	01776
State	Zip Code

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.

Signature of Applicant

Signature of Representative (if any)

Feb. 14, 2022

Date

11/22/2021 Date

Complete Streets Intersection Improvements

Sudbury, MA

NARRATIVE



1.0 INTRODUCTION

On behalf of the Town of Sudbury Department of Public Works (DPW), BETA Group, Inc. (BETA) respectfully submits this Request for Determination of Applicability (RDA) for proposed roadway improvements (the Project) at the intersection of Old Lancaster Road, Concord Road, and Union Avenue in central Sudbury, MA (the Site). The Project is being funded through a Complete Streets Intersection Improvement Grant and is a component of a larger roadway improvement program within the Town of Sudbury. Work proposed at the Site will include:

- Realignment of the intersection of Union Avenue and Concord Road;
- Pavement milling and resurfacing;
- Installation of vertical granite curbing;
- Construction of cement concrete sidewalks and ramps;
- Installation of new signage and rectangular rapid-flashing beacons (RRFBs);
- Trimming of existing vegetation to improve sight distance and signage visibility;
- Installation of one (1) new deep-sump catch basin; and
- Resetting of one (1) existing catch basin.

The Project is anticipated to improve the Site's compliance with the Americans with Disabilities Act (ADA) design standards.

The Project will occur within Areas Subject to Protection and/or Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its Regulations at 310 CMR 10.00 (the Act) and the Town of Sudbury Wetlands Protection Bylaw (Article XXII) and its Regulations (the Bylaw) including the 100-foot Buffer Zone and 100-foot Adjacent Upland Resource Area (AURA) associated with Bank to an intermittent stream channel. Portions of the proposed work meets the criteria for the following minor activities:

- 310 CMR 10.02(2)(f) Conversion of impervious surface to vegetated surface; and
- 310 CMR 10.02(2)(n)(iv) Vegetation cutting for road safety and maintenance.

These minor activities and the remainder of the proposed work, as detailed further in this narrative, will occur within the previously developed rights-of-way and are not anticipated to adversely impact Bank, Land Under Water (LUW), or the AURA. Mitigation measures including the installation of erosion controls upgradient of Resource Areas and preservation of existing trees (following trimming required to improve sight distances) will be implemented to protect Bank, LUW, and vegetated portions of the AURA from adverse impacts. In consideration of the nature of the Project and the Site, it is anticipated that this RDA will preclude the DPW from filing a Notice of Intent (NOI) through the issuance of a Negative 3 Determination.

2.0 SITE DESCRIPTION

The Site consists of the rights-of-way associated with Concord Road, Union Avenue, and Old Lancaster Road in Sudbury, Massachusetts (Figure 1 – Site Locus). Existing improvements at the Site include two (2)-lane public roadways, municipal stormwater infrastructure consisting of catch basins and pipes, overhead electrical wires, utility poles, bituminous concrete sidewalks, stone walls, and paved driveways. An intermittent stream and an adjacent wooded area is located east of the proposed Project.



2.1 WETLAND RESOURCE AREAS

On January 5th and 19th, 2021 a BETA Wetland Scientist conducted a Site visit to identify and delineate the boundary of existing wetland resource areas on and in the immediate vicinity of the Site. Resource Area boundaries were identified and delineated in accordance with the methods developed by the Massachusetts Department of Environmental Protection's *Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act*, dated 1995, as well as definitions set forth in the Wetland Regulations (310 CMR 10.00).

Resource Areas identified at the Site include Bank, LUW, and AURA associated with an intermittent stream.

2.1.1 BANK-310 CMR 10.54

The eastern (*B1 Series*) and western (*B2 Series*) Banks associated with an unnamed intermittent stream east of the Concord Road / Old Lancaster Road intersection was delineated along the first observable break in slope. The western bank of the stream consists primarily of a field stone retaining wall, while the eastern bank consists of leaf litter and vegetation including multiflora rose (*Rosa multiflora*) and Norway maple (*Acer platanoides*). The stream flows in a westerly direction out of a 12-inch reinforced concrete pipe (RCP) and into a 24-inch RCP under Concord Road. A swale within the lawn area to the northeast appears to convey flow of runoff associated with a nearby Bordering Vegetated Wetland (BVW) into an underground structure that discharges to the aforementioned 12-inch RCP.

2.1.2 LAND UNDER WATER - 310 CMR 10.56

LUW is associated with the unnamed intermittent stream along the eastern boundary of Concord Road, between the lower boundaries of the Bank (mean low water). LUW primarily consists of sand and leaf litter. This boundary was not delineated in the field.

2.2 BUFFER ZONES

The B1/B2 Series intermittent stream is afforded a 100-foot Buffer Zone under the Act and the Bylaw. Buffer Zone at the Site consists of a bituminous roadway, wooded areas, and maintained grass areas.

2.3 ADJACENT UPLAND RESOURCE AREA

The Town of Sudbury Bylaw maintains protections for the AURA, an area coincident with the Act Buffer Zone. The existing conditions of the AURA associated with the B1/B2 Series intermittent stream is the same as the Buffer Zone described in Section 2.2.

2.4 NHESP HABITAT AND OTHER SENSITIVE AREAS

No areas mapped as Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife by the Natural Heritage and Endangered Species Program (NHESP) are present at the Site, nor are there any NHESP-mapped Certified or Potential Vernal Pools. The Site is not located with surface water protection areas (Zone A, Zone B, Zone C) or wellhead protection areas (Zone I, Zone II, Interim Wellhead Protection Areas). In addition, there are no mapped Outstanding Resource Waters (ORW) or Areas of Critical Environmental Concern (ACECs) located at the Site.



3.0 DESCRIPTION OF WORK

The Project proposes work with the existing public rights-of-way. All work within jurisdiction of the Sudbury Conservation Commission will occur within Buffer Zone/AURA. No work is proposed within Wetland Resource Areas.

3.1 BUFFER ZONES

Work occurring within the 100-foot buffer zone of the Intermittent Stream will be conducted within the public rights-of-way. Proposed work includes:

- Realignment of the intersection of Union Avenue and Concord Road;
- Pavement milling and resurfacing;
- Installation of vertical granite curbing;
- Construction of cement concrete sidewalks and ramps;
- Installation of new signage and rectangular rapid-flashing beacons (RRFBs);
- Trimming of existing vegetation to improve sight distance and signage visibility;
- Installation of one (1) new deep-sump catch basin; and
- Resetting of one (1) existing catch basin.

The proposed geometric improvements to the intersection will result in the removal of an existing bituminous concrete sidewalk and its replacement with a cement concrete sidewalk within an area that is roadway under existing conditions. This work will result in a slight reduction of impervious area within the Buffer Zone and restoration through the application of a grass seed mixture.

The trimming of existing vegetation to improve sight distances and signage visibility will occur along a 20foot length of vegetation at the eastern side of Concord Street. This work will not result in the full removal of vegetation; all root systems will be left in place.

Prior to any work occurring, erosion control measures will be installed upgradient of the intermittent stream as discussed in Section 3.3.

3.2 ADJACENT UPLAND RESOURCE AREA (AURA)

The AURA associated with the intermittent stream is coincident with the 100-foot Buffer Zone. Therefore, the description of work within AURA is the same as outlined above.

3.3 MITIGATION MEASURES

Best management practices (BMPs) will be in place during construction of the Project to minimize adverse impacts to jurisdictional areas. One (1) new deep sump catch basin will be installed to treat stormwater runoff. Erosion controls consisting of 12-inch compost filter tubes will be installed upgradient of the intermittent stream and maintained during construction to prevent the migration of sediment. Trees will be trimmed with suitable horticultural equipment and methods that preserve the underlying root systems. All cuttings will be removed from the Site and properly disposed of. Disturbed soils resulting from the Project will be seeded with a grass seed mixture for permanent stabilization.



4.0 REQUEST FOR DETERMINATION

The DPW seeks a Determination from the Sudbury Conservation Commission stating that the proposed work will not adversely impact Bank, LUW, or the AURA, and that an NOI filing is not required.

4.1 DETERMINATION REQUEST B.1.C. & D. – WORK SUBJECT TO THE ACT & BYLAW

The DPW is requesting a Negative 3 Determination to confirm that the work as described is within Buffer Zone and the AURA but will not alter an Area Subject to Protection under the Act or Bylaw. The provisions and mitigation measures outlined herein support this Request for Determination.

4.1.1 EXEMPT/MINOR ACTIVITY PROVISIONS

Portions of the Project will meet provisions outlined in the Act which do not require the filing of an NOI. These provisions include:

Conversion of Impervious Surface to Vegetated Surface – 310 CMR 10.02(2)(f)

The Project will reconfigure the roadway geometry of the intersection to improve visibility for motorists. This will involve relocating the western boundary of Concord Road between Union Avenue and Old Lancaster Road resulting in a reduction of approximately 1,500 square feet of impervious paved surface, a portion of which falls within the 100-foot Buffer Zone/AURA. Areas subject to the reduction of impervious area will be seeded with a grass seed mixture for permanent stabilization.

Vegetation Cutting for Road Safety and Maintenance – 310 CMR 10.02(2)(n)(iv)

To improve sight line distances and visibility of the proposed Rectangular Rapid Flashing Beacons (RRFBs), tree trimming is required along a 20-foot stand of trees/vegetation located along the eastern side of Concord Road and within the 100-foot Buffer Zone/AURA to the intermittent stream. The work will be conducted under the direction of the DPW and is not anticipated to result in the removal of trees or their root systems.

4.1.2 MITIGATION MEASURES

As outlined in Section 3.3, BMPs will be implemented during construction including the preservation of existing trees/vegetation and the use of erosion controls upgradient of Resource Areas. Although the AURA at the Site is generally degraded by impervious surfaces, existing vegetation present along the roadway will remain in place following the proposed tree limb trimming. In addition, a slight reduction in impervious area is proposed, and the Site will discharge sheet flow runoff to newly improved municipal stormwater infrastructure following construction.



5.0 SUMMARY

Portions of the Project meet regulatory criteria that preclude the requirement to submit an NOI. Due to the nature of the Project occurring within existing developed areas and implementation the BMPs described herein, the proposed work is not anticipated to adversely impact jurisdictional areas. The DPW respectfully requests the issuance of the following Determination:

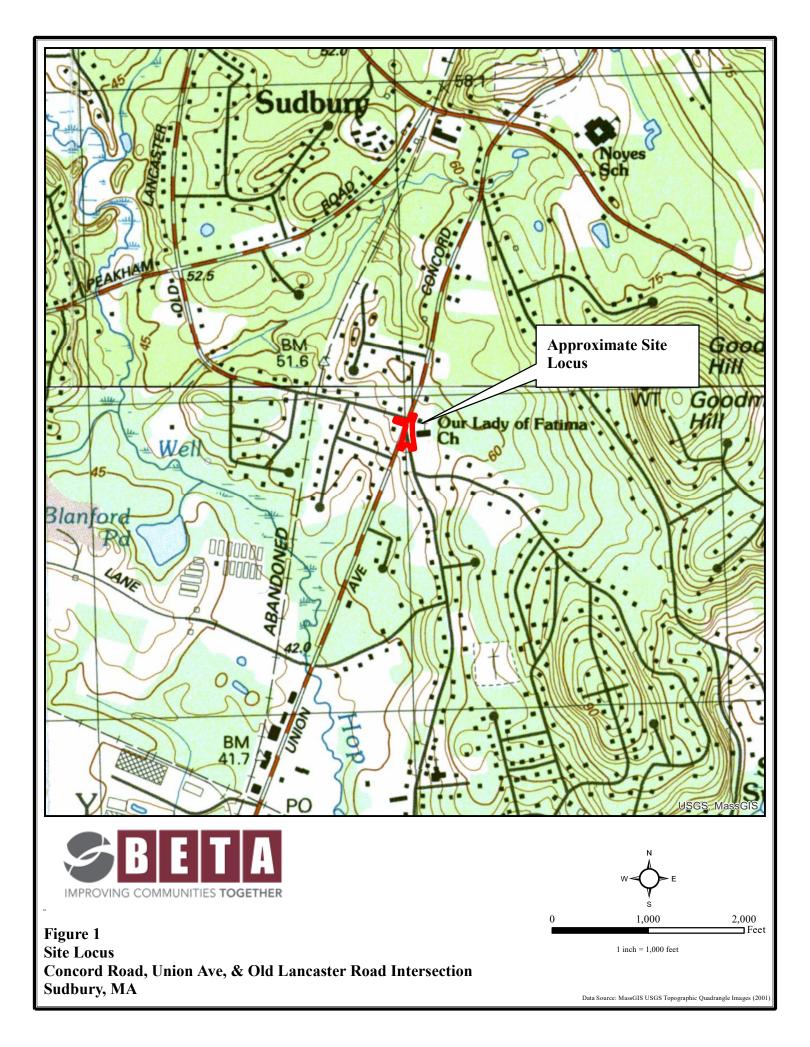
Negative 3: The work described in the Request is within the Buffer Zone, as defined in the regulations, but will not alter an Area subject to protection under the Act. Therefore, said work does not require the filing of a Notice of Intent, subject to the following conditions (if any).

We trust that this RDA application provides sufficient information to facilitate the issuance the Determination described above. Should you have any questions, please do not hesitate to reach out to us at our office.



FIGURES





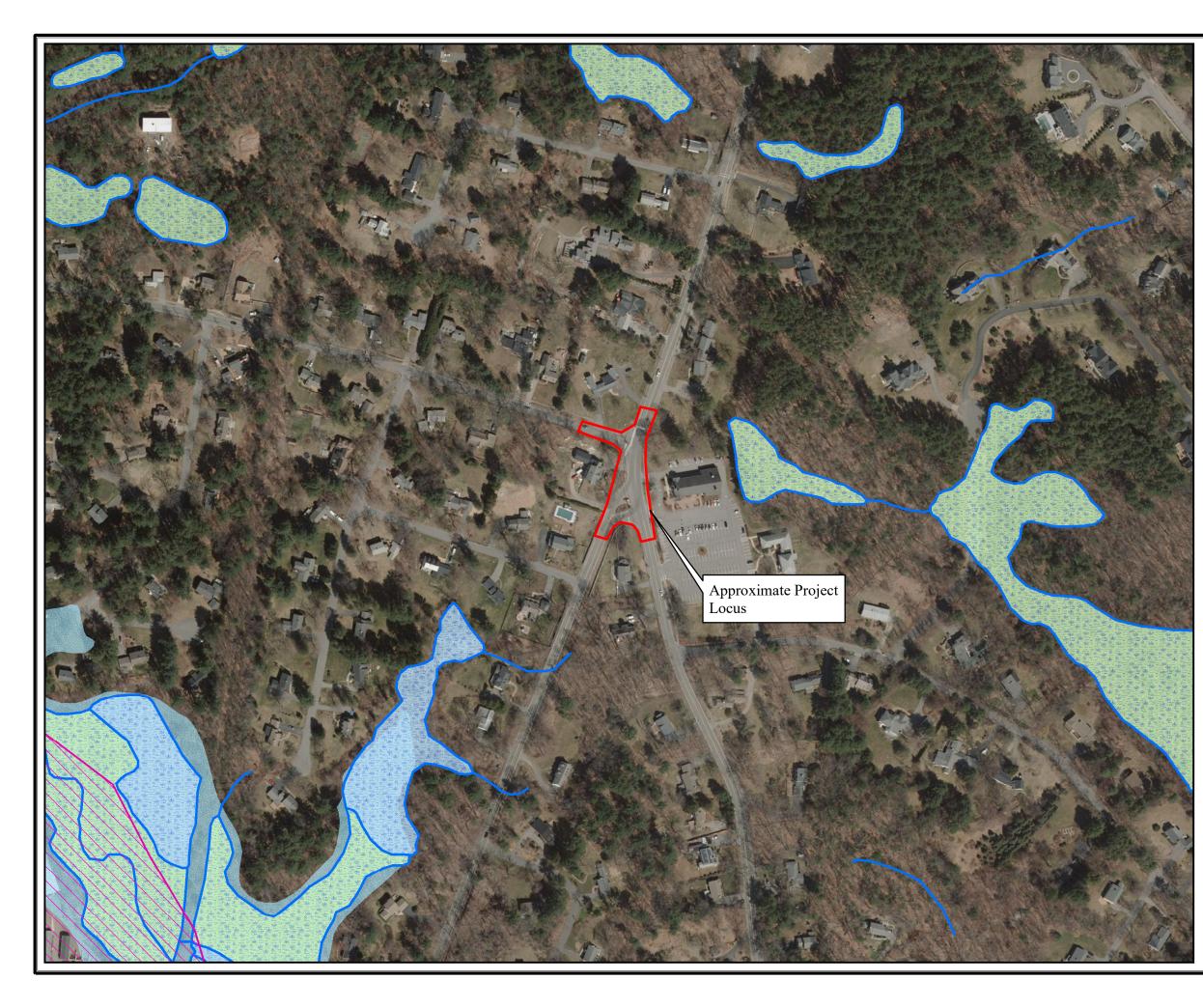


Figure 2 Environmental Resources Map Concord Road, Union Avenue, & Old Lancaster Road Intersection Sudbury, MA

Wetland Resources Legend

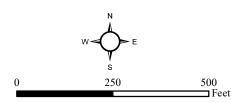
MassDEP Hydrologic Feature Marsh/Bog Wooded marsh Open Water NFHL 100 Year Flood Zone

Drinking Water Protection Legend

Zo	ne A
Zo	ne B
ZO	NE C
	ssDEP Zone I
	ssDEP Zone II
Ma	ISSDEP IWPA
Ou	tstanding Resource Water

Mapped Habitat Legend

- NHESP Potential Vernal Pool
- ★ NHESP Certified Vernal Pool
- NHESP Priority Habitat of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- Area of Critical Environmental Concern (ACEC)



1 inch = 250 feet

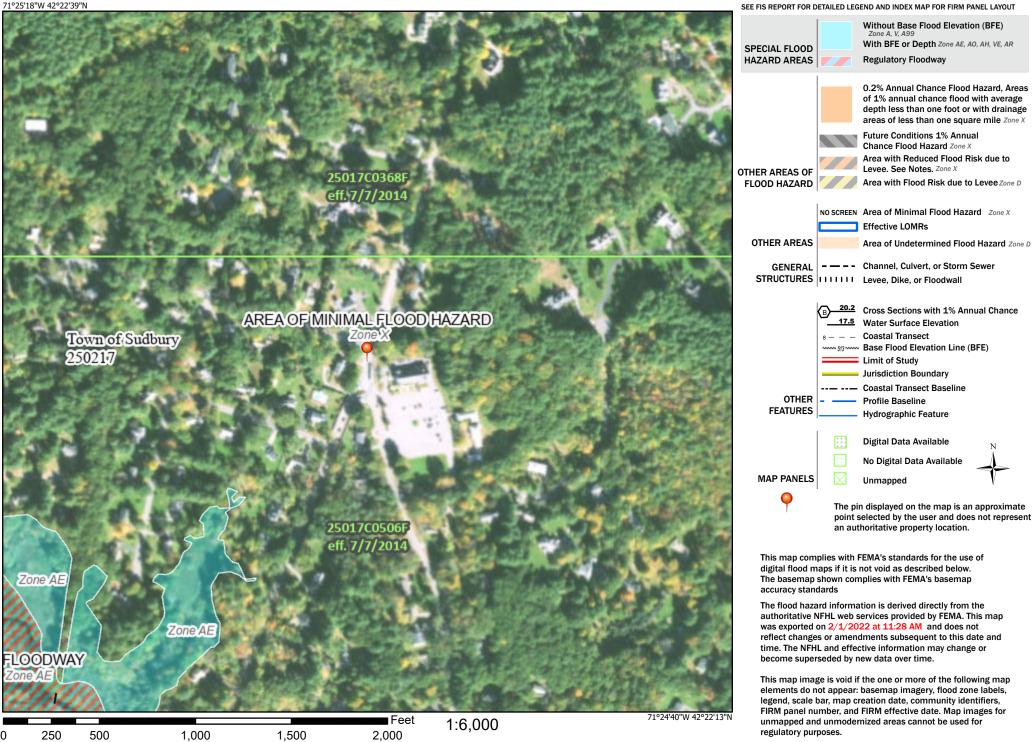
Data Source: MassGIS USGS Color Ortho Imagery (2014), MassDEP Wetlands (1:12000) (2009), NHESP Potential Vernal Pools (2000), NHESP Certified Vernal Pools, NHESP Priority Habitats of Rare Species (2008), NHESP Estimated Habitats of Rare Species (2008), Areas of Critical Environmental Concern (2009), FEMA National Flood Hazard Layer (2014),



National Flood Hazard Layer FIRMette



Legend



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

PHOTOGRAPHIC DOCUMENTATION





View of the RCP that discharges the stream to the stormwater system under Concord Road—facing west.

PHOTOGRAPHIC DOCUMENTATION

Concord Road, Union Avenue, & Old Lancaster Road Intersection Sudbury, Massachusetts Photographs Documented 01.05.2021

Photo 3



View of the 12-inch RCP that discharges into the B1/B2 Series intermittent stream—facing north.

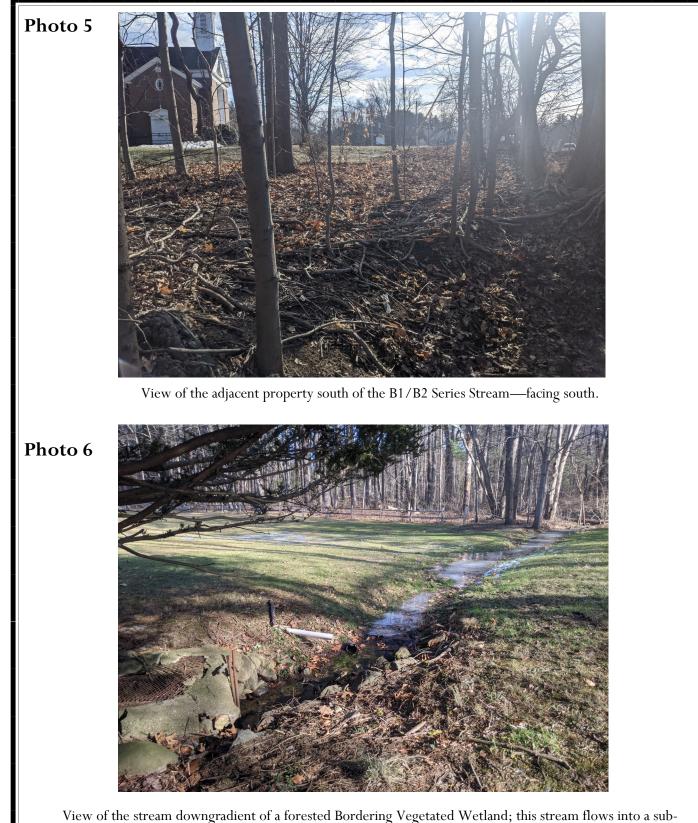
Photo 4



View of the adjacent property north of the B1/B2 Series intermittent stream—facing north.

PHOTOGRAPHIC DOCUMENTATION

Concord Road, Union Avenue, & Old Lancaster Road Intersection Sudbury, Massachusetts Photographs Documented 01.05.2021



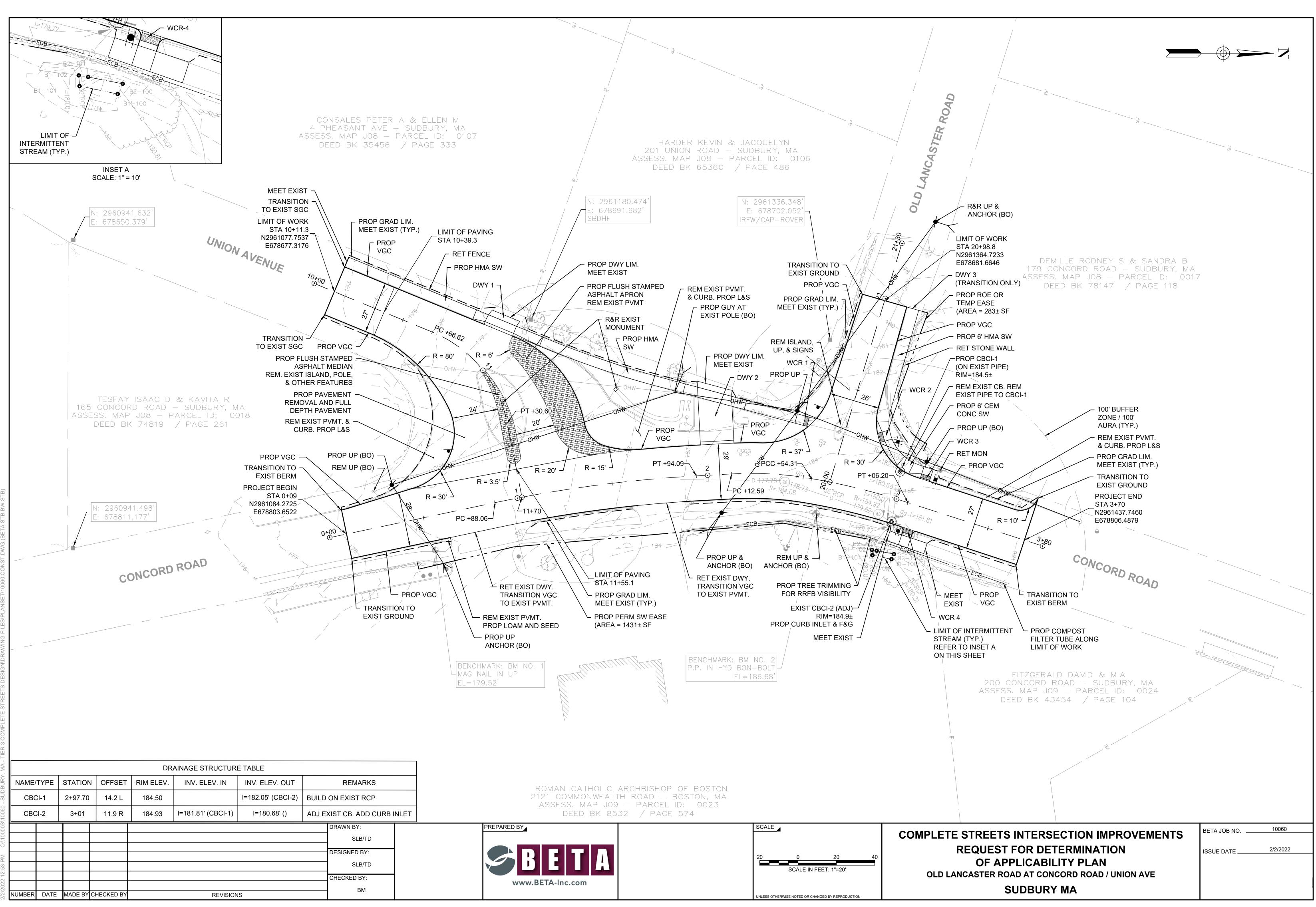
surface structure and discharges to the 12-inch RCP depicted in Photo 3 - facing east.

PHOTOGRAPHIC DOCUMENTATION

Concord Road, Union Avenue, & Old Lancaster Road Intersection Sudbury, Massachusetts Photographs Documented 01.05.2021

APPENDIX A – Request for Determination of Applicability Plan





SBETA-Inc.com

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	SCALE IN FE	EET: 1"=20'		