



February 8, 2024

Catherine Van Lancker, Chairperson
Ashland Conservation Commission
101 Main Street, 2nd Floor
Ashland, MA 01721

**Re: Notice of Intent
Warren Conference Center Lower Pumping Station Replacement & Sewer Improvements
Ashland, Massachusetts**

Dear Ms. Van Lancker and Commissioners:

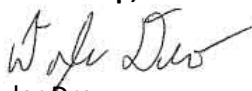
On behalf of Massachusetts State College Building Authority (MSCBA), BETA Group, Inc. (BETA) is submitting a Notice of Intent (NOI) for the Lower Pumping Station Replacement and & Sewer Improvements Project (the Project) at 529 Chestnut Street in Ashland, Massachusetts (the Site). Work proposed under the Project includes the replacement of the Lower Pump Station within the northern portion of the Site, installation of a new electrical service via underground conduit, and the reconfiguration of a portion of the existing sewer system at the Site.

Work associated with the Project will take place within Areas Subject to Protection/Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch131 s.40) and its Regulations at 310 CMR 10.00 (the Act) as well as Ashland Wetland Protection Regulations (Chapter 348) and Bylaw (Chapter 280 – Collectively “the Bylaw”) including Bordering Vegetated Wetland (BVW), the 100-foot Buffer Zone, and the 25-foot No Disturb Zone. Erosion and sediment controls and swamp mats will be used to define the limits of work and minimize impacts. All impacts to jurisdictional areas are temporary in nature and will be restored to preexisting conditions following the completion of work. As a public utility improvement project, this Project is being filed under the Limited Project Provision found in the WPA Regulations 310 CMR 10.53(3)(d); however, all Performance Standards for BVW will be met.

This NOI has been concurrently submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office. Checks to cover the local (\$262.50) and state (\$237.50) portions of the Act fee, as well as the Bylaw fee (\$500.00), are enclosed with this NOI. Abutters have been notified in accordance with State and Local requirements.

We trust that the following application provides adequate information to facilitate the issuance of an Order of Conditions permitting the proposed work. Should you have any additional questions, please do not hesitate to contact us.

Very truly yours,
BETA Group, Inc.


Tyler Drew
Scientist


Jonathan Niro
Senior Project Scientist

cc: Bill McGrath, P.E., BETA
Nicholas Corvello, P.E., BETA
Ann Martin, FSU
Patrick Giard, MSCBA

Job No: 23.11102.00

Ashland, Massachusetts

Lower Pumping Station Replacement & Sewer Improvements

Warren Conference Center

February 2024

NOTICE OF INTENT



BETA

89 Shrewsbury Street
Suite 300
Worcester, MA 01604
508.756.1600
www.BETA-Inc.com

Lower Pumping Station Replacement & Sewer Improvements

Ashland, Massachusetts

Warren Conference Center

NOTICE OF INTENT

Prepared by: BETA GROUP, INC.

Prepared for: Massachusetts State College Building Authority

February 2024

TABLE OF CONTENTS

WPA FORM 3 – NOTICE OF INTENT

LOCAL FILING FORM

ABUTTERS INFORMATION

PROJECT NARRATIVE

- 1.0 Introduction 1
- 2.0 Site Description 1
 - 2.1 Project Locus 1
 - 2.2 Wetland Resource Areas 2
 - 2.3 Buffer Zones 2
 - 2.4 NHESP-Mapped Habitat 2
- 3.0 Work Description 2
 - 3.1 Work within Protected Resource Areas 3
 - 3.2 Work in Buffer Zone and 25-foot No Disturb Zone 3
- 4.0 Mitigation Measures 4
 - 4.1 Erosion and Sedimentation Controls 4
 - 4.2 Water Controls and Dewatering 4
 - 4.3 Stormwater Management 4
 - 4.4 Resource Area and Buffer Zone Restoration 4
- 5.0 Alternatives Analysis 5
- 6.0 Regulatory Compliance 6
 - 6.1 Massachusetts Wetlands Protection Act Regulations 6
 - 6.2 Town of Ashland Wetland Protection Regulations and Bylaw 6
- 7.0 Summary 7

LIST OF FIGURES

- Figure 1 Site Locus
- Figure 2 Environmental Resources
- Figure 3 FEMA FIRMette

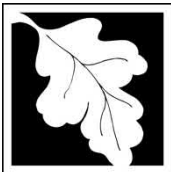
PHOTOGRAPHIC DOCUMENTATION

LIST OF APPENDICES

- Appendix A Wetland Delineation Report
- Appendix B Stormwater Report
- Appendix C Project Plans

Ashland, Massachusetts

WPA FORM 3 – NOTICE OF INTENT



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Ashland

City/Town

Important:

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



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

529 Chestnut Street
a. Street Address

Ashland
b. City/Town

01721
c. Zip Code

Latitude and Longitude:
42.23847
d. Latitude

-71.46050
e. Longitude

0240
f. Assessors Map/Plat Number

0007
g. Parcel /Lot Number

2. Applicant:

Patrick
a. First Name

Giard
b. Last Name

Massachusetts State College Building Authority
c. Organization

10 High Street, Suite 201
d. Street Address

Boston
e. City/Town

MA
f. State

02110
g. Zip Code

617-542-1081
h. Phone Number

i. Fax Number

pgiard@mscba.org
j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

Jonathan
a. First Name

Niro
b. Last Name

BETA Group, Inc.
c. Company

89 Shrewsbury Street, Suite 300
d. Street Address

Worcester
e. City/Town

MA
f. State

01604
g. Zip Code

774-573-9694
h. Phone Number

i. Fax Number

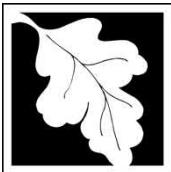
jniro@beta-inc.com
j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

\$500
a. Total Fee Paid

\$237.50
b. State Fee Paid

\$262.50
c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Ashland
City/Town

A. General Information (continued)

6. General Project Description:

The Project proposes improvements to the sanitary sewer system at the Site including the replacement of the Lower Pump Station, replacement of several portions of sewer piping, and installation of a new electrical conduit for the new Lower Pump Station.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)
- 310 CMR 10.53(3)(d) - The construction, reconstruction, operation and maintenance of underground and overhead public utilities....

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Middlesex	
a. County	b. Certificate # (if registered land)
67089	425
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Ashland

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	1,950 1. square feet	1,950 2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced

- f. Riverfront Area
1. Name of Waterway (if available) - **specify coastal or inland**
2. Width of Riverfront Area (check one):
- 25 ft. - Designated Densely Developed Areas only
 - 100 ft. - New agricultural projects only
 - 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Ashland

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	

4. Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

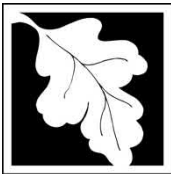
a. square feet of BVW

b. square feet of Salt Marsh

5. Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Ashland

City/Town

C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

- August 2021
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage

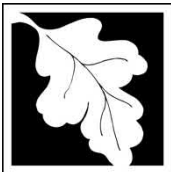
2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **
 - (a) Project description (including description of impacts outside of wetland resource area & buffer zone)
 - (b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Ashland

City/Town

C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following

1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and
the Cape & Islands:

North Shore - Hull to New Hampshire border:

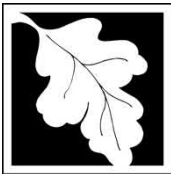
Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

- c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Ashland
City/Town

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

C. Other Applicable Standards and Requirements (cont'd)

- 4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
 a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
 b. ACEC

- 5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
 a. Yes No
- 6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
 a. Yes No
- 7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
 a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
 - 1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 - 2. A portion of the site constitutes redevelopment
 - 3. Proprietary BMPs are included in the Stormwater Management System.
 b. No. Check why the project is exempt:
 - 1. Single-family house
 - 2. Emergency road repair
 - 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

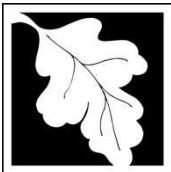
D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

- 1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
- 2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:	
MassDEP File Number	
Document Transaction Number	
Ashland	
City/Town	

D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Lower Pumping Station Replacement & Sewer Improvements

a. Plan Title

BETA Group, Inc.

b. Prepared By

January 2024

d. Final Revision Date

Nicholas Corvello, PE

c. Signed and Stamped by

As shown

e. Scale

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

112332

2. Municipal Check Number

112334

4. State Check Number

Joseph

6. Payor name on check: First Name

1/31/2024

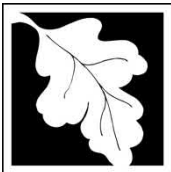
3. Check date

1/31/2024

5. Check date

D'Alesio

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Ashland
City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	02/08/2024
3. Signature of Property Owner	2. Date
5. Signature of Representative	4. Date
	2/8/2024
	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

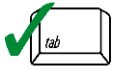
Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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



A. Applicant Information

1. Location of Project:

529 Chestnut Street	Ashland
a. Street Address	b. City/Town
112334	\$237.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Patrick	Giard	
a. First Name	b. Last Name	
Massachusetts State College Building Authority		
c. Organization		
10 High Street		
d. Mailing Address		
Boston	MA	02110
e. City/Town	f. State	g. Zip Code
617-542-1081	pgiard@mscba.org	
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

a. First Name	b. Last Name	
c. Organization		
d. Mailing Address		
e. City/Town	f. State	g. Zip Code
h. Phone Number	i. Fax Number	j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

LOCAL FORMS



Town of Ashland

MASSACHUSETTS

CONSERVATION COMMISSION

Applicant Checklist for NOI/ANRAD/ANOI

This checklist is meant as guide when preparing a permit application during the State of Emergency, which was declared on March 12, 2020. This process shall remain in effect during the State of Emergency and will terminate when the State of Emergency is lifted. Note that submittal dates remain in effect.

1. **Application**- submit 2 paper copies and 1 digital copy of all materials, and 1 Stormwater Management Checklist, if applicable. No spiral bindings!
2. **Narrative**- 1 copy of a written narrative explaining existing conditions, proposed conditions, wetland resource areas on site (protected under the Act (310 CMR 10.02 (1) and the Bylaw (chapter 280)), the 100 foot Buffer Zone, the 25' No Disturb Zone and vernal pools
3. **Locus Map**- 1 copy
4. **Site Plans**- (folded) 1 large copy, and 1 (one) 11"x17" copy, if all details can be read.
Plans must show the following:
 - a. Existing Conditions
 - b. Proposed Conditions
 - c. Erosion Control Barrier- where it will be installed and a detail of the barrier to be used (note, no hay bales!)
 - d. All wetland resource areas (see item 2 above)
 - e. Endangered Species Habitat
5. **Application Fees**
 - a. Wetland Fee Transmittal Form – 1 Copy
 - b. One check to the Commonwealth: 1 copy, see 310 CMR 10.03 (7)(c) to determine the category. Once the category is confirmed, see 310 CMR 4.10 (8) (n)4. for the fee amount.
 - c. One check to the Town of Ashland for the town share of the fee under the Wetlands Protection Act. 2 copies
 - d. A second check to the Town of Ashland for the bylaw fee: 2 Copies (c. 348-2)
6. **Make an extra copy of everything from 1-5 and Submit your Application:**
 - a. State: Electronically submit the application, locus map, narrative and site plans to DEP using [eDEP](#).

- b. State Fee: Submit the state check, transmittal fee form, and photocopy of the town checks to Dept. of Environmental Protection, PO. Box. 4062, Boston, MA. 02211
 - c. Conservation Commission: 101 Main Street, Ashland MA. 01721.c All documents listed above, as well as a pdf as indicated below, and to conservation@ashlandmass.com.
7. For items 1-5, provide a pdf of everything, and CAD Files georeferenced to State Plane NAD 83 ft., if applicable, and send it to conservation@ashlandmass.com
8. **Receive hearing date and time information** from the Conservation Agent, and receive a date and time for a **pre-hearing site visit**.
9. **Legal Notice**. The Conservation Commission posts the legal notice. The applicant will get billed by Gatehouse Media.
10. **Notify Abutters** within 7 business days (no weekends or holidays).
- a. Obtain a Certified List of Abutters from the Assessor's Office
 - b. Notify abutters (certified mailing or hand delivery only) of the hearing date and time using the Commission's template and fill out an Affidavit of Service.
 - c. Mail the proof of Mailing to the Ashland Town Hall, at 101 Main Street. Note that it must be received before the scheduled meeting date. You can drop it off in the grey box located on the side of Town Hall.
11. Attend the Zoom Meeting.

Town of Ashland Conservation Commission

LOCAL FILING FEE CALCULATION WORKSHEET

1. NOTICE OF INTENT (NOI)

C1: Work on Existing Single Family Lot \$110.00 _____
This includes pools, additions, etc.

C2: Construction of Single Family House, Crossings for Driveways, etc. \$500.00 \$500.00

C3: Commercial Building, Road Construction, etc. \$1050.00 _____

C4: Crossings for Development or Commercial Road, Bridge, etc. \$1450.00 _____

C5: Work on Docks, Piers, Dikes, or other Engineering Structures in inland resource areas _____ *\$4= _____
Linear Feet

C6: Resource Area Delineation Review _____ *\$2= _____
Includes boundary delineations for vegetated wetlands as part of a permit application (ANRAD/ RDA with delineations/ NOI with delineations)
Linear Feet

*single family lots limited to \$200;
\$2000 limit for all others

All NOIs add 50% of the fee for work in Riverfront Area _____ *\$0.5= _____
Above Fee

2. STORMWATER MANAGEMENT PERMIT

Basic Residential Application \$100.00 _____

Application for Residential Subdivision or Multifamily Development \$500.00 _____

Commercial Application \$750.00 _____

Notice of Completion for Non-Basic Residential \$150.00 _____

Permit Extension \$150.00 _____

True Copy Attest \$50.00 _____

Re-Inspection \$50.00 _____

3. OTHER PERMITS AND APPLICATIONS

Request for Determination of Applicability \$125.00 _____
Without boundary delineation

Request for Permit Extension \$100.00 _____
Not for Stormwater Management Permits

Amended Notice of Intent SEE NOI _____
Significant Revisions

Certificate of Compliance Single Family Lots \$100.00 _____
Without boundary delineation All Other Projects \$250.00 _____

Reissuance/ True Copy Attest \$50.00 _____
Not for Stormwater Management Permits

6. FILING FEE CALCULATION

Town Share of State Fees (See NOI Wetland Fee Transmittal Form) **(Check No. 1)** \$ \$262.50

Local Filing Fee Calculated Above (Check No.2) \$ \$500.00

State Share of Filing Fee (See NOI Wetland Fee Transmittal Form)

TOTAL Due DEP (Check No. 3) \$ \$237.50

7. ADVERTISING FEE (Paid by phone to newspaper) TBD

The fee will be the exact amount the newspaper charges for that specific advertisement. Once the advertisement is placed with the paper by the Conservation Commission, the applicant will be notified of the cost and will be expected to contact the newspaper for payment within the specified deadline.

ABUTTERS INFORMATION

**TOWN OF ASHLAND
APPLICATION FOR ABUTTERS LIST**

Owner's Name Framingham State University, Massachusetts State College Building Authority

Subject Parcel Address 529 Chestnut Street

Map and Parcel # Parcel ID: 0140240000700000

WITHIN HOW MANY FEET DO YOU NEED ABUTTERS?

Immediate 100 Feet 300 Feet Other - Please Specify _____

PLEASE INDICATE WHICH DEPARTMENT THIS LIST IS FOR.

Inspection Services Zoning Board Planning Board
 Conservation Commission Select Board Board of Health

PLEASE INDICATE BELOW HOW YOU WOULD LIKE TO BE CONTACTED

CONTACT NAME (if different from above): Tyler Drew

MAIL: 89 Shrewsbury Street Suite 300

Worcester, MA 01604

PHONE #: (401) 333-2382

FAX # _____

IF YOU WISH TO RECEIVE THIS LIST BY EMAIL PLEASE LIST EMAIL ADDRESS BELOW.**

EMAIL ADDRESS: TDrew@BETA-Inc.com

COST: \$2.00 PER PARCEL/PER ABUTTER WITH A MAXIMUM OF \$50.00.

Cash or personal checks are accepted. Please make checks out to Town of Ashland.

{{{No abutters lists are to be faxed, mailed or picked up in person until we have payment.}}}}

ASHLAND BOARD OF ASSESSORS

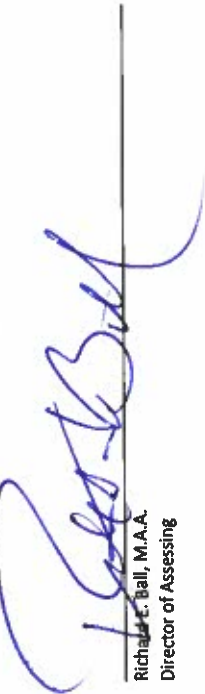
THE LIST IS VALID FOR 90 DAYS FROM CERTIFICATION DATE. THE BOARD OF ASSESSORS RESERVES 10 WORKING DAYS TO PROVIDE ALL CERTIFIED LISTS OF ABUTTERS.

January 26, 2024

To The Conservation Commission
529 Chestnut Street
Massachusetts State College Building Authority
Abutters To Map 24 Parcel 7

PARCEL ID	PARCEL LOCATION	OWNER NAME 1	OWNER NAME 2	MAILING ADDRESS	CITY/TOWN	STATE	ZIP
014/024.0-0001-0000.0	0 MAIN ST	DEPT OF ENVIRONMENTAL MANAGEMENT	(MASS COMMONWEALTH DNR)	251 CAUSEWAY ST SUITE 600 - 700	BOSTON	MA	02114
014/024.0-0008-0000.0	0 ASHLAND RESERVOIR	DEPT OF ENVIRONMENTAL MANAGEMENT	(MASS COMMONWEALTH DNR)	251 CAUSEWAY ST SUITE 600 - 700	BOSTON	MA	02114
014/024.0-0123-0000.0	0 ELIOT ST	TOWN OF ASHLAND		101 MAIN ST	ASHLAND	MA	01721
014/024.0-0125-0000.0	477 CHESTNUT ST	MASSACHUSETTS STATE COLLEGE BUILDING AUTHORITY	(MASS COMMONWEALTH DNR)	10 HIGH ST SUITE 201	BOSTON	MA	02210
014/027.0-0091-0000.0	0 ASHLAND RESERVOIR	DEPT OF ENVIRONMENTAL MANAGEMENT		251 CAUSEWAY ST SUITE 600 - 700	BOSTON	MA	02114
014/028.0-0036-0000.0	45 LAKEVIEW TERRACE EXT	HARDY DOUGLAS A	ANDREA S NOVAKOWSKI	45 LAKEVIEW TERR EXT	ASHLAND	MA	01721
014/028.0-0037-0000.0	39 LAKEVIEW TERRACE EXT	NOVAKOWSKI WILLIAM W		39 LAKEVIEW TERRACE EXT	ASHLAND	MA	01721
014/028.0-0058-0000.0	555 CHESTNUT ST	PAREENE DANIEL M		555 CHESTNUT ST	ASHLAND	MA	01721
014/028.0-0059-0000.0	531 CHESTNUT ST	MASSACHUSETTS STATE COLLEGE BLDG AUTHORITY		10 HIGH ST SUITE 201	BOSTON	MA	02210
014/028.0-0073-0000.0	0 CHESTNUT ST	TOWN OF ASHLAND		101 MAIN ST	ASHLAND	MA	01721

The above reflects the latest information available on our records.



Richard C. Ball, M.A.A.
Director of Assessing

1/26/24
Date



Town of Ashland

MASSACHUSETTS

Conservation Commission

NOTIFICATION TO ABUTTERS- Letter

A/An Notice of Intent

has been filed with the **Ashland Conservation Commission** pursuant to the *Wetlands Protection Act (M.G.L. c. 131 §40)*, *Wetlands Protection Act Regulations 310 C.M.R. 10.05 (4)(a)* and the *Wetlands Protection Bylaw Chapter 280 Section 9*, and/or the *Stormwater Management Regulations Chapter 343*.

The applicant is Patrick Giard - MSCBA

The proposed project is located at 529 Chestnut Street
in Ashland, Massachusetts. The proposed project is:
Replacement of the lower pump station and sewer improvements at the Warren
Conference center.

The filing may be examined by electronic means only. For more information, or to request a pdf filing submittal, please call 508-532-7924, and ask for the Conservation Agent.

The public hearing is scheduled for Monday, February 26, 2024, at 7:05 p.m. (Note that all hearings are posted for 7:05 unless otherwise specified on the agenda. Hearings are taken in order of the posted agenda.) The hearing will be held using Zoom meetings, and the link for the meeting can be found on the posted agenda 48 hours before the hearing is scheduled to meet. Otherwise, further information of the public hearing can be obtained from the Ashland Conservation Commission, by calling 508-532-7924.

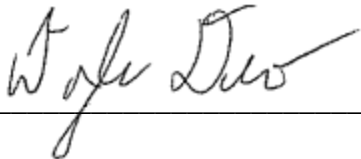
Affidavit of Service
Under the Massachusetts Wetlands Protection Act

(to be submitted to the Massachusetts Department of Environmental Protection and the
Conservation Commission when filing a Notice of Intent)

I, Tyler Drew, hereby certify under the pains and penalties of perjury that on February 8, 2024 I gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent filed under the Massachusetts Wetlands Protection Act by Patrick Giard - MSCBA with the Town of Ashland Conservation Commission on February 8, 2024 for Lower Pump Station Replacement and Sewer Improvements at the Warren Conference Center in Ashland, Massachusetts.

The form of notification, and a list of the abutters to whom it was given and their addresses, are attached to this Affidavit of Service.



Name

2/8/2024

Date

NARRATIVE

1.0 INTRODUCTION

On behalf of the Massachusetts State College Building Authority (MSCBA), BETA Group, Inc. (BETA) is submitting a Notice of Intent (NOI) for the Lower Pumping Station Replacement and & Sewer Improvements Project (the Project) at 529 Chestnut Street in Ashland, Massachusetts (the Site). Work proposed under the Project includes the replacement of the Lower Pump Station within the northern portion of the Site, installation of a new electrical service via underground conduit, and the reconfiguration of a portion of the existing sewer system at the Site.

Work associated with the Project will take place within Areas Subject to Protection/Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch131 s.40) and its Regulations at 310 CMR 10.00 (the Act) as well as Ashland Wetland Protection Regulations (Chapter 348) and Bylaw (Chapter 280 – Collectively “the Bylaw”) including Bordering Vegetated Wetland (BVW), the 100-foot Buffer Zone, and the 25-foot No Disturb Zone (NDZ). The Project is associated with several sewer improvements involving the Lower, Middle, and Upper Pumping Stations at the Site; however, only the following activities are proposed within Areas Subject to Protection/Jurisdiction:

- Installation of erosion and sedimentation controls;
- Installation of swamp mats;
- Clearing of brush/herbaceous vegetation and minor grading to allow access for construction;
- Removal of six (6) trees;
- Demolition of one (1) existing pumping station (the Lower Pumping Station);
- Construction of a new Lower Pumping Station;
- Installation of two (2) new manholes;
- Installation of a subsurface electrical conduit to power the Lower Pumping Station;
- Replacement of a four (4)-inch vitrified clay (VC) sewer pipe with an eight (8)-inch polyvinyl chloride (PVC) sewer pipe at Cabin #3;
- Dewatering of excavated areas;
- Restoration of temporarily impacted BVW; and
- Stabilization of disturbed areas and removal of erosion controls.

Project impacts are temporary and necessary to improve the onsite sewer system. Erosion controls will be maintained throughout construction to define the limits of work and protect downgradient Resource Areas, and swamp mats will be used to minimize impacts to BVW. Restoration of BVW will include backfilling the electrical conduit trench with the native/excavated soils and applying a native wetland seed mixture. As a public utility improvement project, this Project is being filed under the Limited Project provision at 310 CMR 10.53(3)(d)¹; however, all Performance Standards for BVW will be met.

2.0 SITE DESCRIPTION

2.1 PROJECT LOCUS

The Site consists of portions of the properties located at 517 & 529 Chestnut Street in Ashland (Ashland Assessor’s Parcels 14-27-7 & 14-28-59) within the vicinity of three (3) sewage pump stations identified as

¹ 310 CMR 10.53(3)(d) states “The construction, reconstruction, operation and maintenance of underground and overhead public utilities, such as electrical distribution or transmission lines, or communication, sewer, water and natural gas lines, may be permitted...”

the Lower Pump Station, Middle Pump Station, and Upper Pump Station. The Lower Pump Station is located approximately 200 feet southeast of Ashland Reservoir; the Middle Pump Station is located between Chestnut Street and Ashland Reservoir; and the Upper Pump Station is located along Chestnut Street. The Site is bounded to the north by the Ashland Reservoir, to the west and south by residential properties, and to the east by Chestnut Street (Figure 1—Site Locus). Existing improvements at the Site consist of the pump stations, paved and gravel paths, various structures associated with the onsite conference center, and forested areas (Figure 2—Environmental Resources).

2.2 WETLAND RESOURCE AREAS

A Site inspection was conducted by BETA's Wetland Scientist on October 10, 2023 to identify and delineate the boundaries of existing resource areas within the immediate vicinity of the Project Site. Resource area boundaries were 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: Second Edition*, dated September 2022, as well as definitions set forth in the Wetland Regulations (310 CMR 10.00) and the Ashland Wetlands Protection Bylaw.

State-jurisdictional Resource Areas identified on the Site include Bordering Vegetated Wetlands (BVW). A complete description of Areas Subject to Protection under the Act and Bylaw is included in Appendix A – Wetland Delineation Report.

2.3 BUFFER ZONES

The Project is located within the 100-foot Buffer Zone to BVW, as well as the 25-foot NDZ under the local Bylaw. Buffer Zones at the Site within the limit of work primarily consist of undeveloped forest, existing dirt paths, and campus buildings.

2.4 NHESP-MAPPED HABITAT

According to the latest MassGIS data, the Project is not located within NHESP mapped Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife, or an Area of Critical Environmental Concern (ACEC). The Project is also not location within 100 feet of an NHESP Certified Vernal Pool or Potential Vernal Pool. The Site is not located within any Zone I, II or IWPA Groundwater Protection Areas or Zone A, B, or C Surface Water Protection Zones. The Project is also not located within or near mapped Coldwater Fisheries or Outstanding Resource Water (Figure 2 – Environmental Resource Map).

3.0 WORK DESCRIPTION

The proposed Project involves various improvements to the existing sanitary sewer system at the Site. Specific Project elements include:

- Installation of erosion and sedimentation controls;
- Installation of swamp mats;
- Clearing of brush/herbaceous vegetation and minor grading to allow access for construction;
- Removal of six (6) trees;
- Demolition of one (1) existing pumping station (the Lower Pumping Station);
- Construction of a new Lower Pumping Station;
- Installation of two (2) new manholes;
- Installation of a subsurface electrical conduit to power the Lower Pumping Station;

Ashland, Massachusetts

- Replacement of a four (4)-inch vitrified clay (VC) sewer pipe with an eight (8)-inch polyvinyl chloride (PVC) sewer pipe at Cabin #3;
- Dewatering of excavated areas;
- Restoration of temporarily impacted BVW; and
- Stabilization of disturbed areas and removal of erosion controls.

3.1 WORK WITHIN PROTECTED RESOURCE AREAS

The Project will require work within Resource Areas (i.e., BVW) due to the existing layout of the sewer system at the Site and the location of the Lower Pumping Station.

3.1.1 BORDERING VEGETATED WETLAND— 310 CMR 10.55

Proposed work within BVW includes 1,950 sf of temporary impacts associated with installation of the electrical conduit to the new Lower Pumping Station. The proposed electrical conduit will be located within a portion of BVW that has historically been the location of sewer infrastructure and a historic access point to the Lower Pumping Station. Erosion controls will be installed and maintained throughout construction to define the limits of work and protect the adjacent portions of BVW. Swamp mats will be used to minimize impacts to BVW associated with soil compaction, and traffic through the crossing will be limited by using the upland access to the north to the extent feasible. It is anticipated that the electrical conduit will be installed as the contractor backs out of the work area to minimize disturbance.

The existing 4" PVC pipe that crosses the BVW in this location and serves as a hydraulic equalizer between ponded portions of the BVW will be located in the field by the contractor and protected throughout the construction process. No vehicles or machinery will be allowed to access the BVW before installation of erosion controls and swamp mats and will remain on the swamp mats throughout all work conducted within BVW. Following the completion of work, BVW will be restored as discussed in Section 4.4 of this NOI.

3.2 WORK IN BUFFER ZONE AND 25-FOOT NO DISTURB ZONE

A portion of the Project will occur within the 100-foot Buffer Zone to BVW and the local 25-foot NDZ. This work includes installing erosion controls to create an upland access route to the Lower Pumping Station as a means of reducing access through the BVW. This route coincides with an existing path which is located within the 100-foot Buffer Zone. In addition, six (6) trees will be cleared to accommodate the new Lower Pump Station and a portion of an existing field stone wall will be dismantled and stockpiled at the Site.

Work within the 25-foot No-Disturb Zone will total approximately 4,353 sf and includes installation of erosion controls, installation of a portion of the construction mats, and installation of a portion of the proposed electrical conduit. Due to the need to place the conduit through the existing wetland where existing sewer infrastructure is present, these impacts cannot be avoided. One (1) 4-inch diameter tree will be removed from the NDZ.

Work within the 100-foot Buffer Zone totals approximately 15,408 sf and includes demolition and replacement of the Lower Pumping Station, installation of erosion controls for construction access, tree clearing, dewatering during excavation within the wetland, and replacement of several feet of an existing sewer service to the nearby Cabin #3.

4.0 MITIGATION MEASURES

The Project has been designed to avoid disturbances to Areas Subject to Protection/Jurisdiction under the Act and Bylaw to the extent practicable while achieving the Project's goals. Measures provided to mitigate unavoidable impacts to Resource Areas and Buffer Zone will allow the Project to fully comply with the General Performance Standards set forth in the Act/Bylaw.

4.1 EROSION AND SEDIMENTATION CONTROLS

Soil erosion and sedimentation control issues have been considered in the design and construction planning process of the proposed Project. The soil erosion and sedimentation control measures will be installed prior to the initiation of construction activities and maintained throughout construction. Straw wattles and embedded silt fence are proposed at the downgradient limit of disturbance. Once established, these measures will be monitored daily until construction activities are complete.

The erosion control barriers will serve as the strict limits of disturbance for the Project. No alterations, including vegetative clearing or surface disturbance, will occur beyond this line. The limits of clearing, grading, and disturbance will be kept to a minimum within the proposed area of construction. All areas outside of these limits, as depicted on the Project site plans, will remain undisturbed in a natural condition. After significant rainstorms, all sedimentation control measures will be inspected and maintained and/or replaced, as necessary.

4.2 WATER CONTROLS AND DEWATERING

Due to proposed work within and near BVW, high groundwater elevations are anticipated, and dewatering may be necessary to establish dry working conditions when installing the electrical conduit and the Lower Pumping Station infrastructure. Dewatering effluent from the excavated areas will likely be discharged to an upland area to the west within the 100-foot Buffer Zone. The exact means and methods of dewatering will be determined by the contractor; however, dewatering will be conducted in a manner that prevents sediment-laden water from reaching the BVW. A dewatering plan can be submitted to the Conservation Commission prior to the commencement of work if requested.

4.3 STORMWATER MANAGEMENT

According to the Stormwater Management Standards (310 CMR 10.05(6)(k-q)), the proposed work constitutes a Redevelopment Project because the work will result in a negligible increase of impervious area (30 sf). Redevelopment projects are required to meet Standards 1 and 7 through 10 fully; and Standards 2 through 6 only to the maximum extent practicable. A Stormwater Checklist and a narrative describing compliance with the Stormwater Management Standards is enclosed in Appendix B.

There are no existing stormwater improvements on the Site, and there are no proposed increases to stormwater runoff associated with the Project. The work has been designed to minimize ground disturbance and impacts to existing vegetation.

4.4 RESOURCE AREA AND BUFFER ZONE RESTORATION

Prior to installing the electrical conduit, hydric soils will be stockpiled at the Site for reuse and kept moist following the excavation of the trench. Temporary impacts to BVW will be restored by removing construction mats, restoring the area to pre-construction grade using stockpiled material and seeded with

a native wetland seed mixture². It is anticipated that seeding will be sufficient to restore BVW back to preexisting conditions due to this portion of BVW solely consisting of herbaceous vegetation. Disturbed portions of Buffer Zone will be reseeded with a native upland/wildflower seed mixture³. Restoration details are included in Appendix C – Project Plans.

Following restoration, the Site will be monitored for at least two (2) growing seasons to ensure at least 75% coverage of native vegetation. The contractor will be responsible for inspecting the restored area once per year until it has been determined to be successful. If germination is not observed within the first year, the contractor shall submit a written plan to re-establish vegetation within the disturbed areas.

5.0 ALTERNATIVES ANALYSIS

Due to the proposed impacts to BVW, this Alternatives Analysis is being provided as part of the “Avoid / Minimize / Mitigate” sequencing in consideration of the Project purpose. The purpose of the Project is to provide modernized and upgraded sanitary sewer service to the Warren Conference Center to accommodate continued use as a satellite campus by Framingham State University while working within the constraints of the existing layout of infrastructure.

No Build Alternative

The existing sanitary sewer system on the Site is aging and lacks the efficiency and capacity sought by the Project Proponent. Replacement of older sewer infrastructure is considered a preventative measure to prevent failure of pumps and piping and is therefore a component of unavoidable maintenance. Therefore, the No-Build Alternative would not support the Project purpose and was not selected.

Sewer Infrastructure Replacement Alternative (Preferred Alternative)

This alternative involves excavating portions of the existing sanitary sewer system and replacing them with new pumps, manholes, and piping to increase the lifespan of the onsite system. This alternative will result in impacts to BVW and Buffer Zone due to the layout of the existing infrastructure. However, once the Project is completed, it is anticipated that the upland path north of the Lower Pumping Station will be used for future access to prevent continued disturbance to BVW. This alternative was selected, as it balances the Project purpose and the minimization of Resource Area impacts.

Sewer Relocation Alternative

This alternative involves abandoning the Lower Pumping Station and associated infrastructure and constructing a new pumping station and series of piping outside of BVW / Buffer Zone. Layout constraints at the Site including the existing buildings, presence of wetlands, and topography restrict potential locations that could accommodate new sewer infrastructure. In addition, this alternative would require

² It is anticipated that a native wetland seed mix will consist of the following species: Fox Sedge (*Carex vulpinoidea*), Lurid Sedge (*Carex lurida*), Blunt Broom Sedge (*Carex scoparia*), Blue Vervain (*Verbena hastata*), Fowl Bluegrass (*Poa palustris*), Hop Sedge (*Carex lupulina*), Green Bulrush (*Scirpus atrovirens*), Creeping Spike Rush (*Eleocharis palustris*), Fringed Sedge (*Carex crinita*), Soft Rush (*Juncus effusus*), Spotted Joe Pye Weed (*Eupatorium maculatum*), Rattlesnake Grass (*Glyceria canadensis*), Swamp aster (*Aster puniceus*), Blueflag (*Iris versicolor*), Swamp Milkweed (*Asclepias incarnata*), Square stemmed Monkey Flower (*Mimulus ringens*).

³ It is anticipated that a native upland seed mix will consist of the following species: Virginia Wild Rye (*Elymus virginicus*), Little Bluestem (*Schizachyrium scoparium*), Big Bluestem (*Andropogon gerardii*), Red Fescue (*Festuca rubra*), Switch Grass (*Panicum virgatum*), Partridge Pea (*Chamaecrista fasciculata*), Panicleleaf Tick Trefoil (*Desmodium paniculatum*), Indian Grass (*Sorghastrum nutans*), Blue Vervain (*Verbena hastata*), Butterfly Milkweed (*Asclepias tuberosa*), Black Eyed Susan (*Rudbeckia hirta*), Common Sneezeweed (*Helenium autumnale*), Heath Aster (*Aster pilosus/Symphotrichum pilosum*), Early Goldenrod (*Solidago juncea*), Upland Bentgrass (*Agrostis perennans*).

extensive tree clearing and may result in BVW impacts regardless to abandon/remove existing infrastructure. Therefore, this alternative was not selected.

6.0 REGULATORY COMPLIANCE

The Project qualifies as a Limited Project under the provisions found at 310 CMR 10.53(3)(d); accordingly, the proposed work is required to meet the General Performance Standards to the extent practical. However, the Project is designed to fully meet the General Performance Standards for BVW.

6.1 MASSACHUSETTS WETLANDS PROTECTION ACT REGULATIONS

The Project has been designed to comply with General Performance Standards fully. Work is proposed within BVW and 100-foot Buffer Zone to BVW.

6.1.1 BORDERING VEGETATED WETLAND 310 CMR 10.55(4)

Impacts proposed within BVW are temporary in nature and will be restored in place; therefore, there will be no loss/destruction of BVW per 310 CMR 10.55(4)(a). Due to the locations of the existing utilities, these impacts are unavoidable and the Alternatives Analysis and proposed BVW restoration outlined in this NOI demonstrates adherence to the “Avoid / Minimize / Mitigate” sequencing. The Performance Standards at 310 CMR 10.55(4)(b) are not applicable because the impacts proposed by the Project are temporary and will not result in a loss of BVW. All restoration efforts will be monitored following construction as described in this NOI to ensure at least 75% coverage of native vegetation.

6.2 TOWN OF ASHLAND WETLAND PROTECTION REGULATIONS AND BYLAW

The Bylaw Regulations maintain a 25-foot NDZ setback from Resource Areas where work is required to meet the Performance Standards per the Bylaw. The Project requires a Waiver from the 25-foot NDZ as noted below.

6.2.1 NO DISTURB ZONE

Work within the NDZ is unavoidable due to the location of the existing sewer infrastructure and will require a Waiver per Section 348-3 D. of the Bylaw Regulations.

1. Although prohibited by the Bylaw, the Project will require clearing of vegetation, excavation of soils, and operation of vehicles within the NDZ to allow access to the existing infrastructure and install the electrical conduit. Therefore, a Waiver is required as noted below. No grading or fill is proposed within NDZ.
2. The Project does not propose any new structures within the NDZ.
3. The Project will require a Waiver from the performance standards for the proposed wetland crossing and electrical conduit installation. The electrical conduit will be installed underground, and all disturbed areas will be restored following completion of the work.

The Applicant hereby requests a Waiver from the 25-foot NDZ Performance Standards due to the proposed work and this NOI demonstrating the following per Section 348-3 D. of the Bylaw Regulations:

- All disturbed areas within BVW and the adjacent Buffer Zone will be restored in place with a native seed mixture following the completion of the Project. With the exception of the removal of one (1) 4-inch tree, the vegetative community within the BVW/NDZ will be

substantially similar to preexisting conditions (i.e., a dominance of herbaceous vegetation). This will support the stabilization of onsite soils and the reestablishment of similar wildlife habitat compared to current conditions.

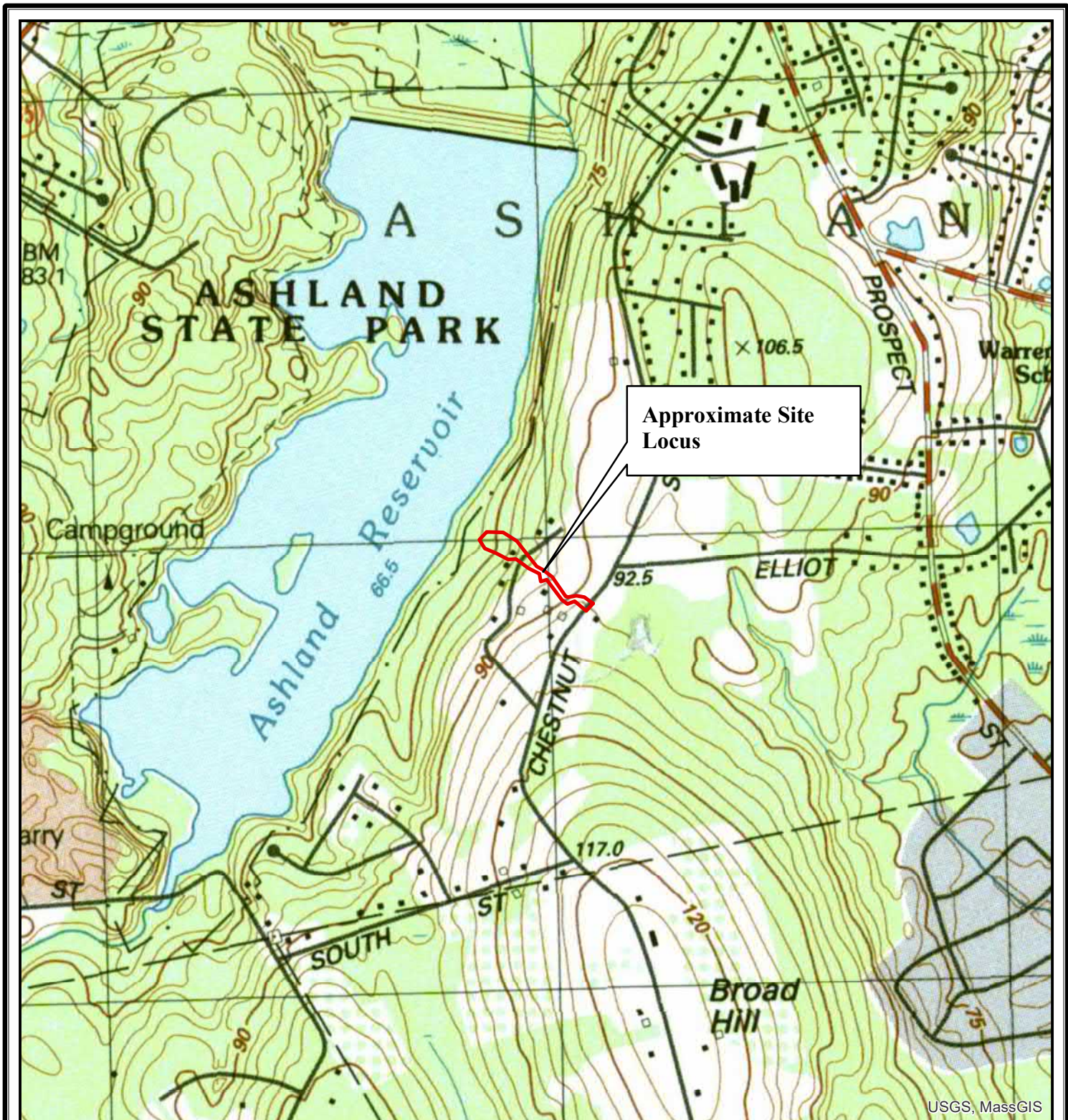
- It is anticipated that the portions of BVW where existing sewer infrastructure and the proposed electrical conduit is located will not be used for future access, and uplands will be used for maintenance vehicles to access the Lower Pumping Station as needed. The Project also proposed to protect and maintain an existing 4-inch PVC pipe that serves as a hydraulic equalizer between ponded portions of the BVW. Therefore, impacts to water quality of the adjacent BVW is not anticipated in consideration of current or future uses of the area. Should additional infrastructure maintenance be required in the future, an NOI will be filed at that time as appropriate.
- The work will protect wetland interests at the Site by maintaining erosion and sedimentation controls throughout construction to define the limits of work and reduce the likelihood of additional impacts. All temporarily impacted areas will be restored in place and monitored to ensure successful establishment of vegetation in a manner that substantially mirrors preexisting conditions.

7.0 SUMMARY

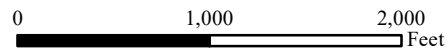
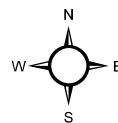
The proposed Lower Pump Station Replacement Project will upgrade the existing sanitary sewer system at the Warren Conference Center to improve its capacity and increase its lifespan. This work will occur primarily within upland areas with the exception of the wetland crossing required for the installation of an electrical conduit. All impacts are proposed to be temporary and will be restored following completion of the Project.

The Applicant respectfully requests that the Ashland Conservation Commission find these measures adequately protective of the interests of the Act and the Bylaw in the Order of Conditions approving the work as described in the NOI and accompanying plans.

FIGURES



USGS, MassGIS



1 inch = 1,000 feet

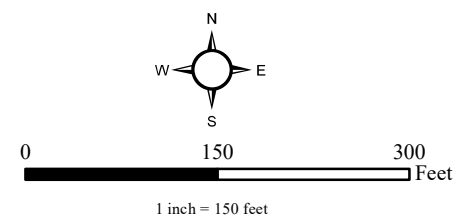
Figure 1
Site Locus
Warren Conference Center
Ashland, MA

Figure 2
Environmental Resources Map
Warren Conference Center
Ashland, MA



Approximate Project Locus

- Wetland Resources Legend**
- MassDEP Hydrologic Feature
 - Marsh/Bog
 - Wooded marsh
 - Open Water
 - NFHL 100 Year Flood Zone
- Drinking Water Protection Legend**
- Zone A
 - Zone B
 - Zone C
 - MassDEP Zone I
 - MassDEP Zone II
 - MassDEP IWPA
 - Outstanding Resource Water
- Mapped Habitat Legend**
- NHESP Certified Vernal Pool
 - NHESP Potential Vernal Pool
 - NHESP Priority Habitat of Rare Species
 - NHESP Estimated Habitats of Rare Wildlife
 - Area of Critical Environmental Concern (ACEC)



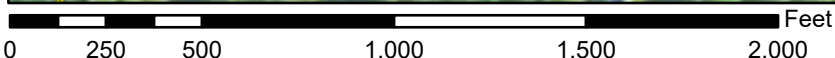
Data Source: MassGIS USGS Color Ortho Imagery (2014), MassDEP Wetlands (1:12000) (2009), NHESP Potential Vernal Pools (2000), NHESP Certified Vernal Pools, NHESP Priority Habitats of Rare Species (2008), NHESP Estimated Habitats of Rare Species (2008), Areas of Critical Environmental Concern (2009),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



National Flood Hazard Layer FIRMMette



71°27'55"W 42°14'31"N



1:6,000

71°27'18"W 42°14'4"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **1/23/2024 at 2:20 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Photographic Documentation

Photo 1



View of the WF1 Series BVW from flag WF1-103—facing west.

Photo 2



View of WF1 Series BVW and the internal intermittent stream from wetland flag WF1-105—facing south-east.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

Photo 3



View of the WF1 Series BVW from flag WF1-112 where the BVW extends into the overgrown pump station access path—facing southeast.

Photo 4



View of the WF1 Series wetland from wetland flag WF1-121—facing south.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

Photo 5



View of the Lower Pump Station—facing southwest.

Photo 6



View of the Middle Pump Station—facing south.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

Photo 7



View of the Upper Pump Station—facing southeast.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

APPENDIX A –Wetland Delineation Report

**Resource Area Boundary Delineation
517 & 529 Chestnut Street Pump Stations
Ashland, Massachusetts**

January 16, 2024

On October 10, 2023, BETA Group, Inc. (BETA) Wetland Scientists identified and delineated Resource Area boundaries associated with three (3) sewage pump stations located at 517 & 529 Chestnut Street in Ashland, Massachusetts (the Site). This report describes Wetland Resource Areas Subject to Protection under the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131 Section 40 - the Act), the federal Clean Water Act (CFR 33 U.S.C. §1251 et seq (1972)), the Massachusetts Clean Water Act (MGL Chapter 21 Section 26-53), and the Town of Ashland Wetland Protection Bylaw (Town of Ashland, Division 2, Part II, §280-1 - §280-17) (the Bylaw) that exist on and within proximity to the Site, and the methodology used to delineate their boundaries.

Site Description

The Site consists of portions of the properties located at 517 & 529 Chestnut Street in Ashland (Ashland Assessor’s Parcels 14-27-7 & 14-28-59) within the vicinity of three (3) sewage pump stations identified as the Lower Pump Station, Middle Pump Station, and Upper Pump Station. The Lower Pump Station is located approximately 200 feet southeast of Ashland Reservoir; the Middle Pump Station is located between Chestnut Street and Ashland Reservoir; and the Upper Pump Station is located along Chestnut Street. The Site is bounded to the north by the Ashland Reservoir, to the west and south by residential properties, and to the east by Chestnut Street (Figure 1—Site Locus). Existing improvements at the Site consist of the pump stations, paved and gravel paths, various structures associated with the onsite conference center, and forested areas (Figure 2—Environmental Resources).

According to the USDA Natural Resources Conservation Service – Soil Survey, mapped soils on and in the vicinity of the Site are classified as Rainbow Silt Loam, Broadbrook Very Fine Sandy Loam, and Narragansett Silt Loam, very stony. Field work performed by BETA generally confirmed the soil types within the Site. The *Custom Soil Resource Report for Middlesex County, Massachusetts* is attached.

State Jurisdictional Resource Areas identified within and adjacent to the Site consist of Bordering Vegetated Wetlands (BVW). The MassGIS database was used as the initial step in identifying critical areas on or within proximity to the Site. Table 1 describes selected environmentally critical categories as determined through MassGIS.

Table 1. Selected MassGIS Environmental Data Layers (Source: MassGIS)

Mapped Resource On or Within Proximity to Site	Yes	No
Area of Critical Environmental Concern		✓
NHESP Certified Vernal Pool		✓
NHESP Potential Vernal Pool		✓
Coldwater Fisheries Resource		✓
NHESP Established Habitat of Rare Wildlife		✓
NHESP Priority Habitat of Rare Species		✓
Outstanding Resource Waters		✓
FEMA Flood Zones ¹	✓	
Surface Water Protection Area (Zones A and B)		✓
Interim Wellhead Protection Area		✓

Mapped Resource On or Within Proximity to Site	Yes	No
Zone II Wellhead Protection Area		✓
Wild and Scenic River		✓
Dam		✓

¹A FEMA Flood Zone is located approximately 200 feet northwest of the Site.

Jurisdictional Wetland Resource Areas – Massachusetts Wetlands Protection Act

A Site visit was conducted by BETA Wetland Scientists on October 10, 2023, to identify and delineate Wetland Resource Areas present at, and adjacent to, the Site. Resource Area boundaries were identified and delineated in accordance with methods developed by the Massachusetts Department of Environmental Protection’s *Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act: Second Edition*, dated September 2022, as well as definitions set forth in the Wetland Regulations, 310 CMR 10.00. Several Areas Subject to Protection under the Act exist on or adjacent to the Site and are described below.

Bordering Vegetated Wetlands – 310 CMR 10.55

According to 310 CMR 10.55(2), the definition of BVW are freshwater wetlands which border on creeks, Rivers, streams, ponds and lakes and are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of BVW is the line within which 50% or more of the vegetation community consists of wetland indicator plants and saturated or inundated conditions exist.

BETA identified one (1) area of BVW in proximity to the Site. The attached Army Corps of Engineers data forms show evidence of hydrophytic vegetation, hydric soils, and indicators of hydrology at specific data plots.

Table 2: BVW Boundary Description

Flag Series	Location	Description / Notes
WF1 Series Flags WF1-100 to 126	East, south, and west of the Lower Pump Station	The WF1 Series BVW is located east, south, and west of the Lower Pump Station and primarily consists of forested wetland complexes on both sides of an overgrown pump station access path that transitions into a scrub shrub wetland complex where the BVW extends into the path. A four (4) inch diameter polyvinyl chloride (PVC) pipe serving as a hydraulic equalizer between the forested wetland complexes on either side of the pump station access path was observed to be conveying hydrology in southwesterly direction under the path near flag WF1-108. A stream flowing north into the Ashland Reservoir is present interior to the BVW; this stream is not depicted on United States Geological Survey (USGS) topographic maps or the StreamStats application and is therefore presumed to be intermittent. The attached U.S. Army Corps of Engineers Field Data Sheets describe evidence of hydrology, hydric soils, and hydrophytic vegetation at a specific data plot.

Bordering Land Subject to Flooding – 310 CMR 10.57

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Number 25017C0627F, dated July 17, 2014, there is a Zone A Flood Hazard in the vicinity of the Ashland Reservoir. Zone A Flood Hazards do not have a published base flood elevation (BFE). The Zone A Flood Hazard is depicted approximately 200 feet northwest of the Site.



Jurisdictional Wetland Resource Areas – Town of Ashland Bylaw

The Bylaw and associated regulations provide definitions that differ from those found in the Act, including the following:

25-Foot No Disturb Zone

The Bylaw defines the inner 25 feet of the Buffer Zone as a No Disturb Zone. No alterations, structures, or other activities which may adversely affect Resource Areas are allowed without the submission of a waiver request and the Conservation Commission's approval.

The 25-foot No Disturb Zone is measured from the boundary of BVW and generally consists of forested areas and portions of the overgrown access path. This Buffer Zone was not delineated in the field.

Bank

The Bylaw defines the upper boundary of Bank as the first observable break in slope or the mean annual flood level, whichever is higher.

An intermittent stream with jurisdictional Bank is present within the WF1 Series BVW; however, Bank was not delineated in the field.

Isolated Land subject to Flooding

The Bylaw defines Isolated Land Subject to Flooding (ILSF) as isolated depressions or closed basins with neither an inlet nor an outlet that, at least once per year, confines standing water to an average depth of six (6) inches and has a minimum surface area of 5,000 square feet.

No areas that meet the Act or Bylaw definition of ILSF were observed at the Site.

Pond

The Bylaw defines a Pond as any open body of fresh water with a surface area observed or recorded within the last ten years of at least 5,000 square feet. Ponds may either be naturally occurring or man-made impoundment, excavation or otherwise, and shall contain standing water except for periods of extended drought.

The Ashland Reservoir is considered a Pond per the Bylaw; however, it is located over 200 feet from the Site and was not delineated. No Ponds were observed within the Site.

Stream

The Bylaw defines a Stream as a body of running water, including brooks and creeks, which moves in a definite channel in the ground due to a hydraulic gradient. In addition to the definition of a Stream under the Act, the Bylaw also takes jurisdiction over channels upgradient of Resource Areas as Streams.

One (1) intermittent stream Subject to Jurisdiction under the Act and the Bylaw was observed interior to the WF1 Series and its associated Banks were not delineated in the field.

Vernal Pool

The Bylaw defines a Vernal Pool any confined basin or depression not occurring in existing lawns, gardens, landscaped areas or driveways which, at least in most years, holds water for a minimum of two continuous months during the spring and/or summer, contains at least 200 cubic feet of water at some time during most years, is free of adult fish populations, and provides essential breeding and rearing habitat functions for amphibian, reptile or other vernal pool community species, regardless of whether the site has been certified by the Massachusetts Division of Fisheries and Wildlife. The

boundary of the resource area for vernal pools shall be the mean annual high-water line defining the depression.

No areas that meet the Act or Bylaw definition of Vernal Pool were observed at the Site.

Jurisdictional Wetland Resource Areas – Federal Clean Water Act (Section 404)

The wetland and interior intermittent stream located at the Site are “waters of the United States,” and are therefore subject to the federal Clean Water Act, 33 U.S.C. §1251 et seq (1972). The boundary to “waters of the United States” is the vegetated wetlands boundary, or, in the absence of vegetated wetlands, is the Ordinary High Water Mark (OHWM) for non-tidal rivers and streams, as specified at 33 CFR §328.4.

According to 33 CFR §328.3(c)(4), vegetated wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” The wetland boundary previously described in this report was delineated in accordance with this definition. US Army Corps vegetated wetland boundary delineation field data sheets are attached documenting BETA’s observations of evidence of hydrology, soils, and hydrophytic vegetation at specific data plots.

Work requiring the placement of fill below the boundary of vegetated wetlands at the Site is subject to jurisdiction under Section 404 of the Clean Water Act.

Jurisdictional Wetland Resource Areas – Massachusetts Clean Waters Act (Section 401)

The limit of jurisdiction under Massachusetts Clean Waters Act (Section 401), as specified in 314 CMR 9.00, is the limit of Section 404 jurisdiction under the federal Clean Water Act. Exceedances of the jurisdictional threshold under 314 CMR 9.00 require filing for a Water Quality Certification under Section 401.

Findings and Recommendations

BETA has identified areas Subject to Protection and/or Jurisdiction under the Massachusetts Wetlands Protection Act, the federal Clean Water Act, the Massachusetts Clean Waters Act, and the Town of Ashland Wetlands Protection Bylaw on or within 100 feet of the Site and have delineated the boundary of Bordering Vegetated Wetlands that exist at the Site. In order to definitively determine the extent of Conservation Commission jurisdiction, Army Corps jurisdiction, and MassDEP jurisdiction, the boundary flags would need to be located and depicted on a to-scale plan of the Site.

Attachments: Figure 1 – Site Locus
Figure 2 – Environmental Resources Map
Figure 3 – FEMA FIRMette
Figure 4 – Delineation Sketch
Photographic Documentation
US Army Corps of Engineers’ *Vegetated Wetland Boundary Delineation Field Data Sheets*
Custom Soil Report for Middlesex County, Massachusetts

Job No: 23.11102.00

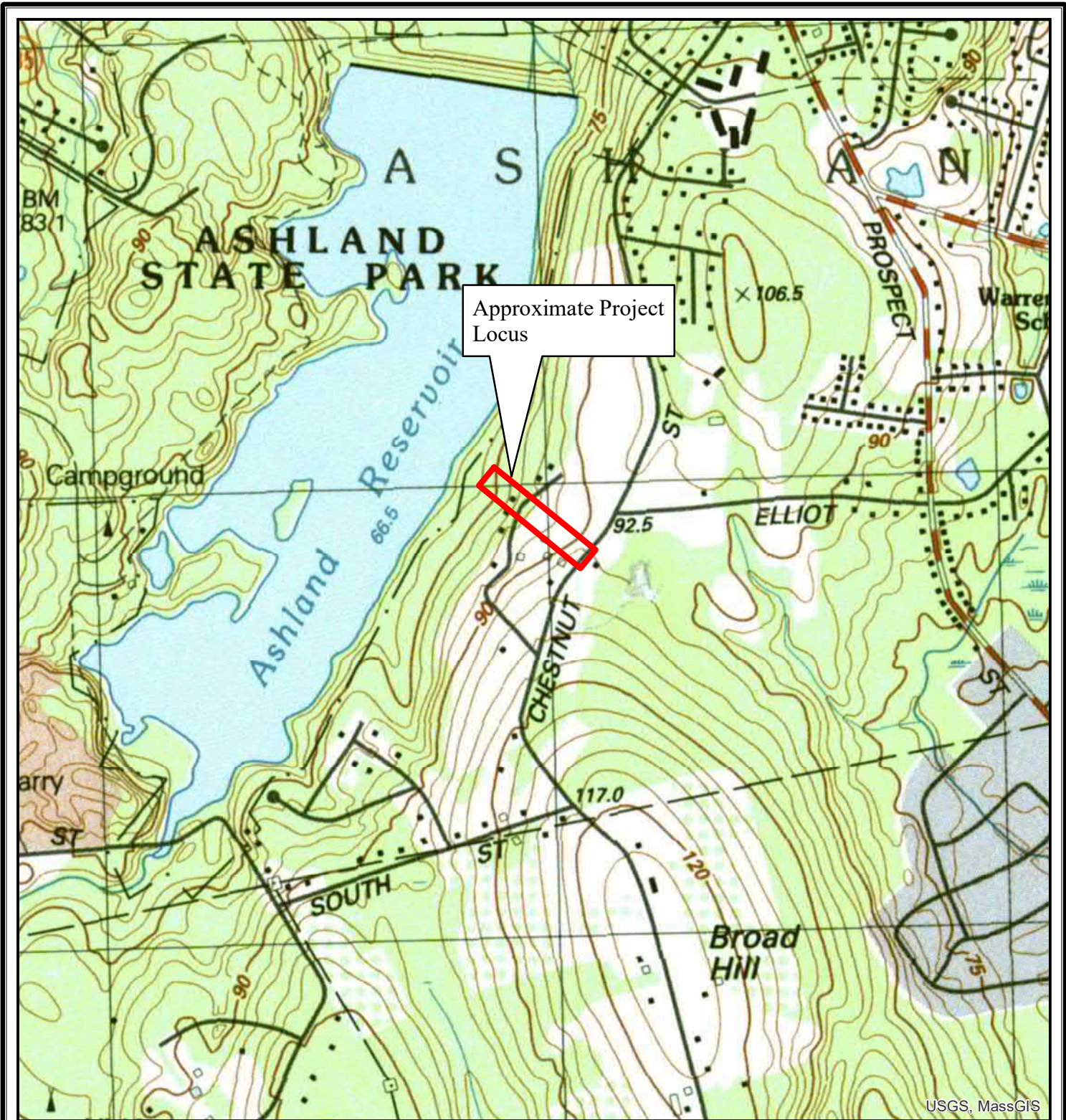


Figure 1
Site Locus
517 and 529 Chestnut Street
Ashland, MA

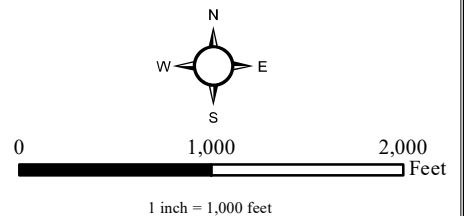
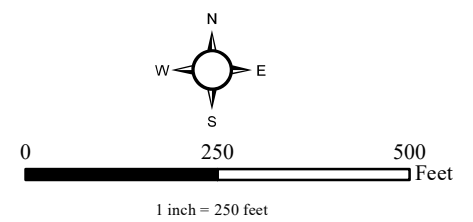


Figure 2
Environmental Resources Map
517 and 529 Chestnut Street
Ashland, MA



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

- Wetland Resources Legend**
- ▨ Zone A
 - ▨ Zone B
 - ▨ Zone C
 - ▨ MassDEP IWPA
 - ▨ MassDEP Zone I
 - ▨ MassDEP Zone II
 - ▨ Outstanding Resource Water
 - ▨ Marsh/Bog
 - ▨ Wooded marsh
 - ▨ Open Water



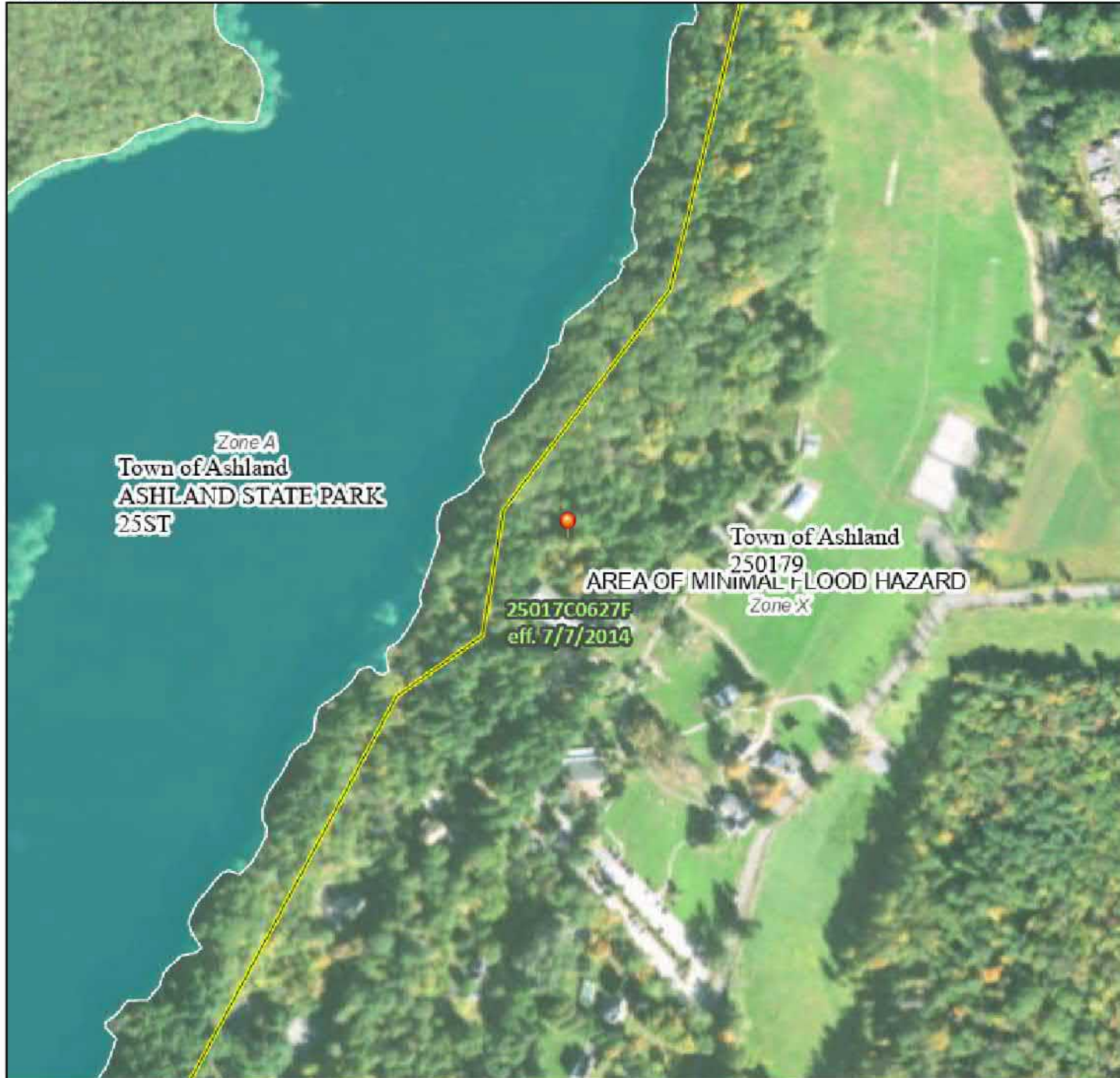
Data Source: MassGIS USGS Color Ortho Imagery (2014), MassDEP Wetlands (1:12000) (2009), NHESP Potential Vernal Pools (2000), NHESP Certified Vernal Pools, NHESP Priority Habitats of Rare Species (2008), NHESP Estimated Habitats of Rare Species (2008), Areas of Critical Environmental Concern (2009),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



National Flood Hazard Layer FIRMMette



71°27'59"W 42°14'33"N



1:6,000

71°27'21"W 42°14'16"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, AS9</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
		Area of Undetermined Flood Hazard <i>Zone D</i>
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/11/2023 at 10:06 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



Photo 1



View of the WF1 Series BVW from flag WF1-103—facing west.

Photo 2



View of WF1 Series BVW and the internal intermittent stream from wetland flag WF1-105—facing south-east.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

Photo 3



View of the WF1 Series BVW from flag WF1-112 where the BVW extends into the overgrown pump station access path—facing southeast.

Photo 4



View of the WF1 Series wetland from wetland flag WF1-121—facing south.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

Photo 5



View of the Lower Pump Station—facing southwest.

Photo 6



View of the Middle Pump Station—facing south.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023

Photo 7



View of the Upper Pump Station—facing southeast.

PHOTOGRAPHIC DOCUMENTATION

517 & 529 Chestnut Street

Ashland, Massachusetts

Photographs Documented October 10, 2023



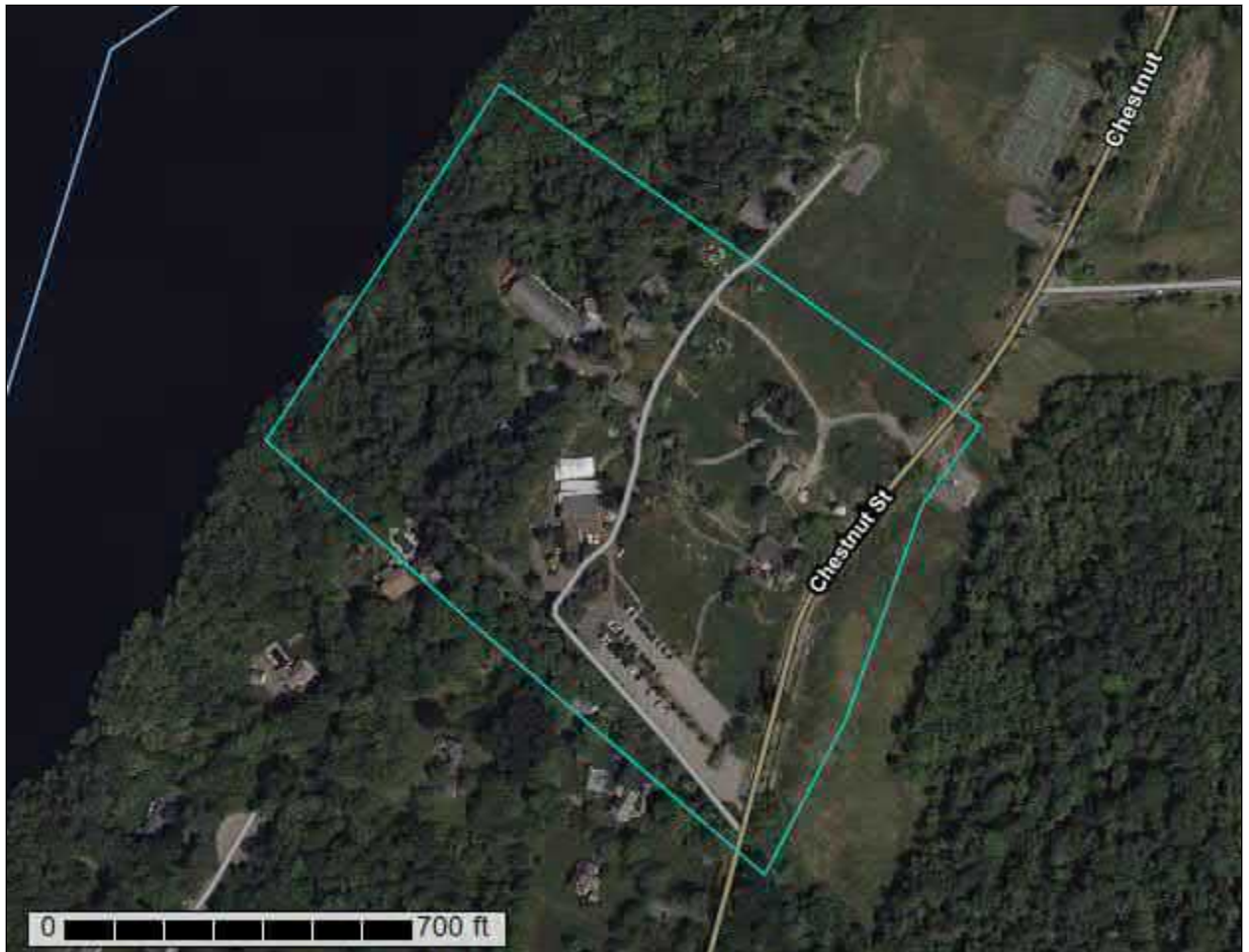
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Middlesex County, Massachusetts



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Middlesex County, Massachusetts.....	13
1—Water.....	13
335B—Rainbow silt loam, 3 to 8 percent slopes.....	13
340D—Broadbrook very fine sandy loam, 8 to 25 percent slopes.....	15
416C—Narragansett silt loam, 8 to 15 percent slopes, very stony.....	16
416D—Narragansett silt loam, 15 to 25 percent slopes, very stony.....	18
References	20

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

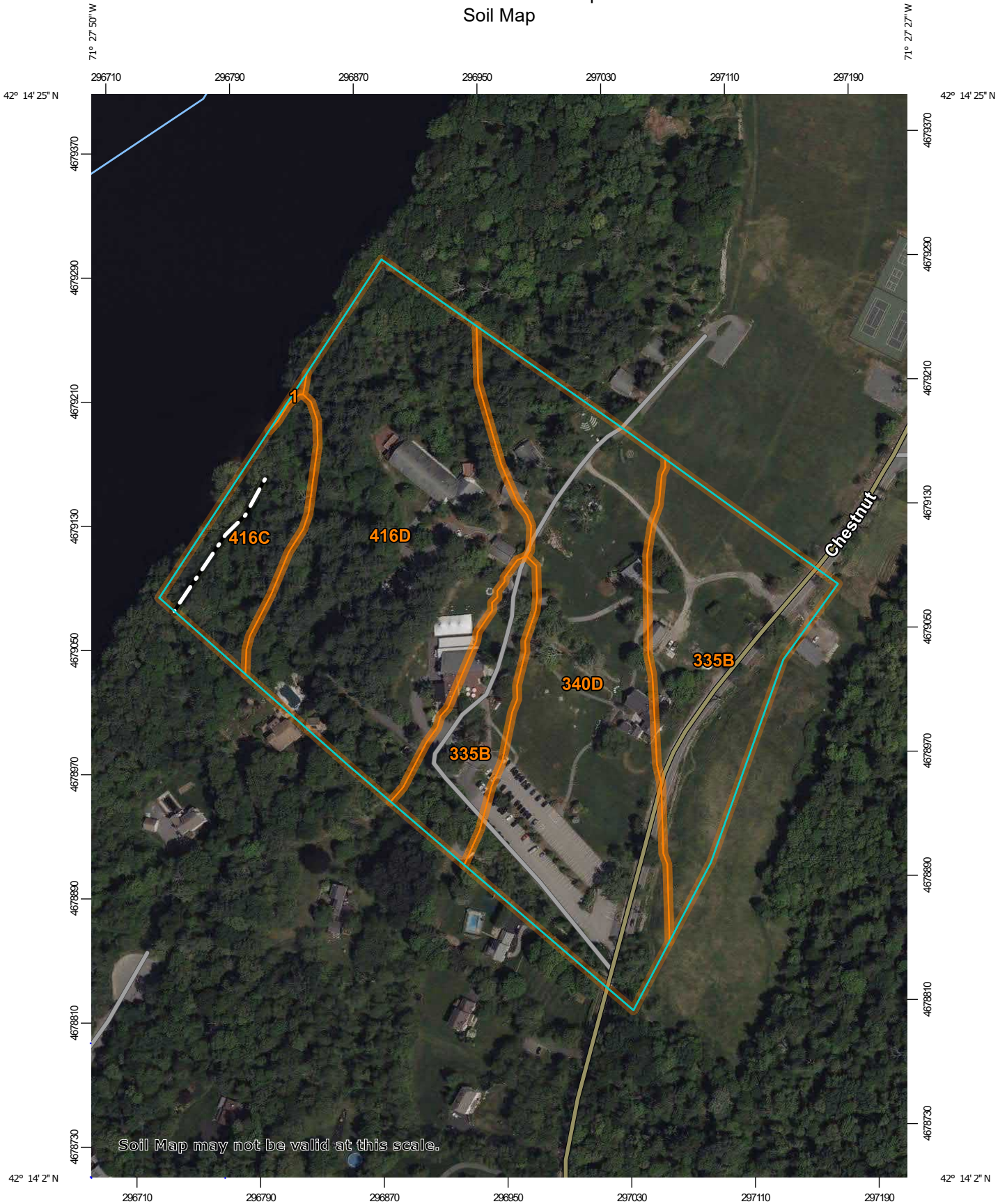
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

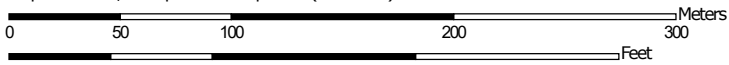
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map







































Map Scale: 1:3,400 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)	 Area of Interest (AOI)	 Spoil Area
Soils	 Soil Map Unit Polygons	 Stony Spot
	 Soil Map Unit Lines	 Very Stony Spot
	 Soil Map Unit Points	 Wet Spot
Special Point Features	 Blowout	 Other
	 Borrow Pit	 Special Line Features
	 Clay Spot	Water Features
	 Closed Depression	 Streams and Canals
	 Gravel Pit	Transportation
	 Gravelly Spot	 Rails
	 Landfill	 Interstate Highways
	 Lava Flow	 US Routes
	 Marsh or swamp	 Major Roads
	 Mine or Quarry	 Local Roads
	 Miscellaneous Water	Background
	 Perennial Water	 Aerial Photography
	 Rock Outcrop	
	 Saline Spot	
	 Sandy Spot	
	 Severely Eroded Spot	
	 Sinkhole	
	 Slide or Slip	
	 Sodic Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
 Survey Area Data: Version 23, Sep 12, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Water	0.0	0.1%
335B	Rainbow silt loam, 3 to 8 percent slopes	6.4	24.3%
340D	Broadbrook very fine sandy loam, 8 to 25 percent slopes	8.9	33.5%
416C	Narragansett silt loam, 8 to 15 percent slopes, very stony	2.0	7.6%
416D	Narragansett silt loam, 15 to 25 percent slopes, very stony	9.2	34.6%
Totals for Area of Interest		26.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Middlesex County, Massachusetts

1—Water

Map Unit Setting

National map unit symbol: 996p
Frost-free period: 110 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear

335B—Rainbow silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9931
Elevation: 110 to 510 feet
Mean annual precipitation: 45 to 54 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 145 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Rainbow and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rainbow

Setting

Landform: Hillslopes
Landform position (two-dimensional): Shoulder, toeslope
Landform position (three-dimensional): Nose slope, base slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Friable fine-loamy eolian deposits over dense loamy lodgment till derived from metamorphic rock

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 22 inches: silt loam
H3 - 22 to 32 inches: very fine sandy loam

Custom Soil Resource Report

H4 - 32 to 65 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 39 inches to densic material

Drainage class: Moderately well drained

*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high
(0.01 to 0.20 in/hr)*

Depth to water table: About 18 to 21 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Ecological site: F144AY037MA - Moist Dense Till Uplands

Hydric soil rating: No

Minor Components

Broadbrook

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, backslope

Landform position (three-dimensional): Nose slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Paxton

Percent of map unit: 3 percent

Landform: Hillslopes

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Head slope, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Woodbridge

Percent of map unit: 2 percent

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, toeslope

Landform position (three-dimensional): Nose slope, base slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: No

340D—Broadbrook very fine sandy loam, 8 to 25 percent slopes

Map Unit Setting

National map unit symbol: vr1t
Elevation: 100 to 480 feet
Mean annual precipitation: 45 to 54 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Broadbrook and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Broadbrook

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Friable silty eolian deposits over dense loamy lodgment till derived from gneiss

Typical profile

H1 - 0 to 2 inches: moderately decomposed plant material
H2 - 2 to 10 inches: very fine sandy loam
H3 - 10 to 20 inches: gravelly very fine sandy loam
H4 - 20 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 20 percent
Depth to restrictive feature: 18 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F144AY007CT - Well Drained Dense Till Uplands
Hydric soil rating: No

Minor Components

Narragansett

Percent of map unit: 7 percent
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Paxton

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Head slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Rainbow

Percent of map unit: 3 percent
Landform: Hillslopes
Landform position (two-dimensional): Shoulder, toeslope
Landform position (three-dimensional): Nose slope, base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

416C—Narragansett silt loam, 8 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 9941
Elevation: 0 to 1,000 feet
Mean annual precipitation: 45 to 54 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Narragansett and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Narragansett

Setting

Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope

Custom Soil Resource Report

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Friable silty eolian deposits and/or friable loamy eolian deposits over loose sandy glaciofluvial deposits derived from metamorphic rock and/or friable sandy basal till derived from metamorphic rock

Typical profile

O_i - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: silt loam

B_w - 7 to 35 inches: silt loam

2C₁ - 35 to 60 inches: very gravelly loamy sand

2C₂ - 60 to 65 inches: very gravelly loamy sand

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 18 to 35 inches to strongly contrasting textural stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (K_{sat}): Moderately high to high (0.60 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Charlton

Percent of map unit: 10 percent

Landform: Ground moraines, drumlins

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Canton

Percent of map unit: 7 percent

Landform: Hills

Landform position (two-dimensional): Backslope, toeslope

Landform position (three-dimensional): Side slope, base slope

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Scituate

Percent of map unit: 3 percent

Landform: Hillslopes, depressions

Landform position (two-dimensional): Summit, toeslope

Custom Soil Resource Report

Landform position (three-dimensional): Head slope, base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

416D—Narragansett silt loam, 15 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: 9942
Elevation: 0 to 1,000 feet
Mean annual precipitation: 45 to 54 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Narragansett and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Narragansett

Setting

Landform: Ground moraines
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Friable silty eolian deposits and/or friable loamy eolian deposits over loose sandy glaciofluvial deposits derived from metamorphic rock and/or friable sandy basal till derived from metamorphic rock

Typical profile

O_i - 0 to 2 inches: slightly decomposed plant material
A - 2 to 7 inches: silt loam
B_w - 7 to 35 inches: silt loam
2C₁ - 35 to 60 inches: very gravelly loamy sand
2C₂ - 60 to 65 inches: very gravelly loamy sand

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 18 to 35 inches to strongly contrasting textural stratification
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (K_{sat}): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Custom Soil Resource Report

Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Canton

Percent of map unit: 10 percent

Landform: Hills

Landform position (two-dimensional): Backslope, toeslope

Landform position (three-dimensional): Side slope, base slope

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Charlton

Percent of map unit: 10 percent

Landform: Ground moraines, drumlins

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX B – Stormwater Report

STORMWATER MANAGEMENT CHECKLIST NARRATIVE
Lower Pumping Station Replacement & Sewer improvements
Warren Conference Center, Ashland, MA

Introduction

The proposed project includes construction of a new wastewater pumping station to replace the existing Lower Pumping Station and construction of new gravity sewer main to convey wastewater generated on the property to the new station. The existing force main sewer shall be utilized to the extent practical. A new section of force main sewer will be constructed to connect the new Lower Pumping Station to the existing force main sewer at that location. New sections of force main sewer will be constructed to connect the existing force main sewer segments around the Middle and Upper Pumping Stations to provide one continuous force main sewer from the new Lower Pumping Station to the discharge point on the Town of Ashland's sewer system. Three (3) existing pumping stations on site shall be mechanically demolished and abandoned in place as part of this project.

The following is a narrative outlining the Stormwater Management Standards and their relation to the proposed project. The project is considered a Redevelopment Project under the Massachusetts Stormwater Management Standards per the definition at 310 CMR 10.04 under the following category: *"Development, rehabilitation, expansion and phased projects on previously developed sites provided the redevelopment results in no net increase in impervious area."* The project's conformance with these standards is described below.

LID Measures

Low Impact Development (LID) techniques utilized along portions of the project consist of minimizing disturbance to existing trees and shrubs.

Standard 1: No New Untreated Discharges - Met

There are no new outfalls proposed as part of this project.

Standard 2: Peak Rate Attenuation - Met to the Maximum Extent Practicable

The project will result in a net increase in impervious cover of $30\pm$ ft² which will result in insignificant increases to the volume and rate of stormwater runoff from the project area. No adverse impacts to the surrounding area are anticipated. The project complies to the maximum extent practicable.

Standard 3: Recharge - Met to the Maximum Extent Practicable

As noted above, the project will result in a net increase in impervious cover of $30\pm$ ft² which will result in insignificant increases to the volume and rate of stormwater runoff from the project area. Due to the lack of space without further impacting identified wetland buffer areas, stormwater infiltration will not be a component of the proposed project and no subsurface investigation was performed. The project complies to the maximum extent practicable.

Standard 4: Water Quality - Met to the Maximum Extent Practicable

There are no existing or proposed stormwater management systems in place within environmental resource areas that are relative to the project. The fenced-in site and the upland path leading to the access gate will be maintained to prevent vegetative overgrowth. All other surrounding areas will be left in their natural state.



Standard 5: Land Uses with Higher Potential Pollutant Loads – Not applicable

Standard 6: Critical Areas – Not applicable

Standard 7: Redevelopment Projects - Met

The project meets the definition of a Redevelopment project under the following definition: *“Development rehabilitation, expansion and phased projects on previously developed sites, provided the redevelopment results in no net increase in impervious area.”* The project also qualifies as a limited project under 310 CMR 10.53 (3)(d). The project area has been designed, to the best extent possible, to minimize land disturbance and creation of new impervious surfaces.

Standard 8: Erosion and Sediment Control - Met

The project is anticipated to disturb greater than one acre; filing a Notice of Intent with EPA and developing a Stormwater Pollution Prevention Plan (SWPPP) is required. The project will provide erosion and sedimentation controls by means of straw wattles with silt fence as shown on the project plans.

Standard 9: Operation and Maintenance Plan - Met to the Maximum Extent Practicable

There are no existing or proposed stormwater management systems in place within environmental resource areas that are relative to the project. The fenced-in site and the upland path leading to the access gate will be maintained to prevent vegetative overgrowth. All other surrounding areas will be left in their natural state.

Standard 10: Illicit Discharges - Met

There are no known or suspected illicit discharges within the project area; new illicit discharges are prohibited.

Conclusion

The proposed work is being completed in conformance with the requirements set forth in 310 CMR 10 to the maximum extent feasible.

Portions of the work will take place within environmental resource areas including Bordering Vegetated Wetlands (BVW), the 25-ft No Disturb Buffer Zone, and 100-ft Buffer Zone. All reasonable and practicable measures will be incorporated in the construction of the project to avoid or minimize these impacts. As a result, the disturbances to BVW will be temporary, and the permanent impacts to Buffer Zone consist solely of a minor increase in impervious area that is not anticipated to result in adverse impacts to the BVW. In addition, the Stormwater Management Standards were reviewed and applied (to the maximum extent practicable) to the design of the project.



Checklist for Stormwater Report

A. Introduction

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



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



Nicholas J. Corvello 2024.02.02
12:06:42 -05'00'

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of "country drainage" versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does **not** cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

APPENDIX C – Project Plans

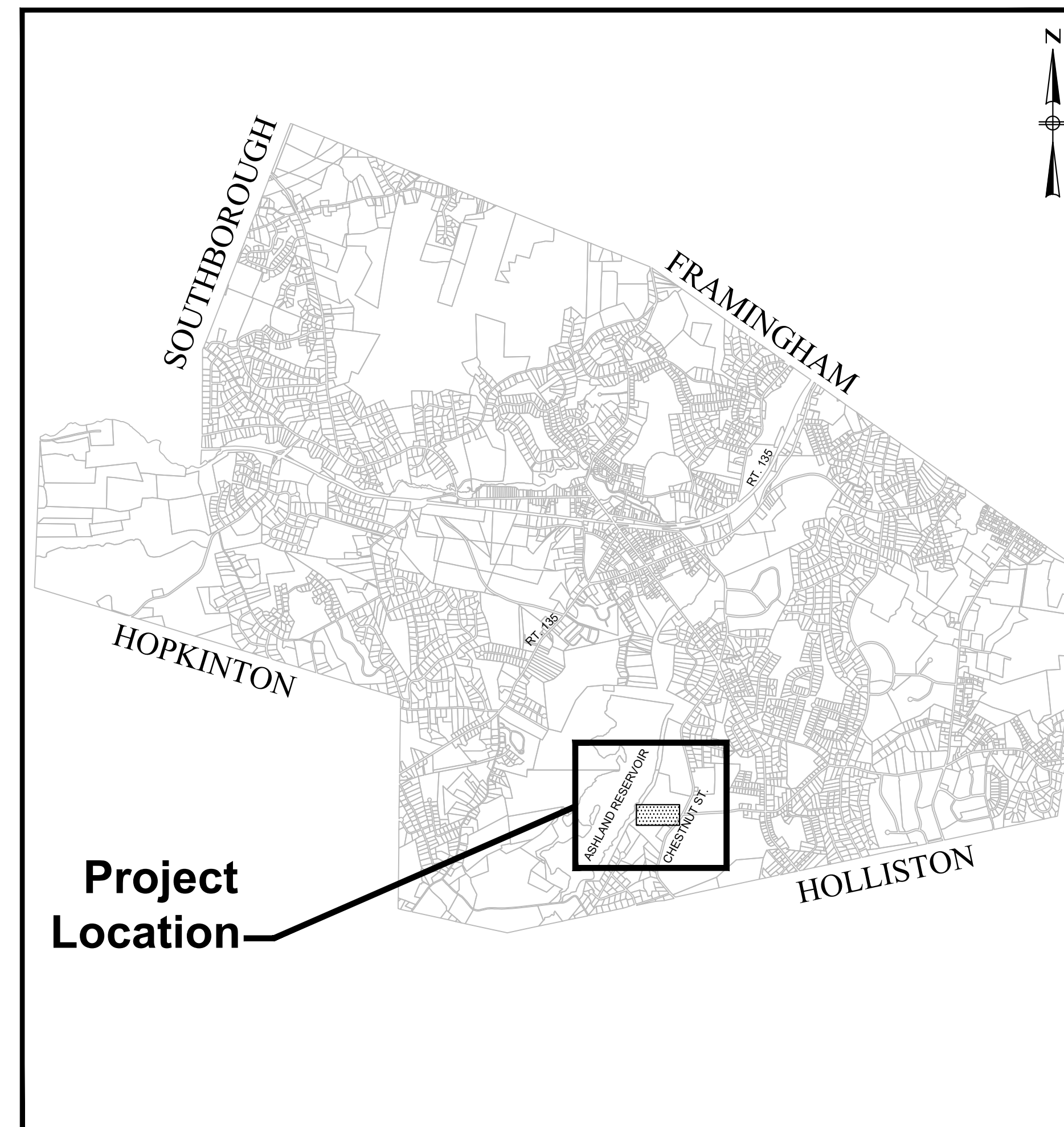
FRAMINGHAM STATE UNIVERSITY WARREN CONFERENCE CENTER

LOWER PUMPING STATION REPLACEMENT & SEWER IMPROVEMENTS

CONTRACT NO. FRA 0932-21
FEBRUARY 2024

PLAN INDEX

- G-1 - LEGEND & ABBREVIATIONS
- G-2 - GENERAL NOTES
- C-1 - SITE PREPARATION PLAN I
- C-2 - SITE PREPARATION PLAN II
- C-3 - STA. 0+00 TO 3+50 SEWER PLAN & PROFILE
- C-4 - MIDDLE & UPPER PUMP STATION SITE IMPROVEMENTS
- C-5 - RESOURCE AREA RESTORATION PLAN
- CD-1 - CIVIL DETAILS I
- CD-2 - CIVIL DETAILS II
- CD-3 - CIVIL DETAILS III
- M-1 - LOWER & MIDDLE PUMP STATION DEMOLITION PLANS & SECTIONS
- M-2 - UPPER PUMP STATION DEMOLITION PLANS & SECTIONS
- M-3 - LOWER PUMP STATION REPLACEMENT PLANS & SECTIONS



PROJECT LOCATION

LOCATION MAP
NOT TO SCALE

PREPARED BY:



ISSUE DATE: 2/8/2024

NOTICE OF INTENT
SUBMISSION
NOT FOR CONSTRUCTION



REGISTERED PROFESSIONAL DATE

