



May 7, 2021

John Reilly, Chair
Weymouth Conservation Commission
75 Middle Street
Weymouth, MA 02189

**Re: Notice of Intent – Wharf Street Incinerator Demolition
87 Wharf Street, Weymouth, MA**

Dear Mr. Reilly and Commissioners:

On behalf of the Town of Weymouth, BETA Group, Inc. is submitting a Notice of Intent (NOI) for site work associated with the demolition of the incinerator at 87 Wharf Street (the Site). Proposed work includes the abatement and demolition of the incinerator, removal of bituminous concrete surfaces, abandonment of drainage infrastructure, removal of fill piles, maintenance of a stormwater basin, and grading/seeding.

Portions of the work associated with the Project will take place within Areas Subject to Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its Regulations (the Act) as well as the Town of Weymouth Wetlands Protection Ordinance (Section 7-300) and its Regulations (the Ordinance), which includes the Ordinance 100-foot Buffer Zone to Land Subject to Coastal Storm Flowage. A comprehensive erosion and sedimentation control plan will be implemented to protect the downgradient Resource Areas during construction, and all disturbed areas will be stabilized with loam and seed following completion of the Project. The Project will also comply with the MassDEP Stormwater Management Standards to the extent practicable as a Redevelopment Project that will substantially reduce impervious areas at the Site.

This NOI has been concurrently submitted to the Massachusetts Department of Environmental Protection (MassDEP) Southeast Regional Office. As a municipal project, this NOI filing is not subject to fees under the Act or the Ordinance. In addition, abutters within 100 feet of the Project have been notified of the hearing date via Certificate of Mailing.

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

Very truly yours,
BETA Group, Inc.



Jonathan Niro
Environmental Scientist



Laura Krause
Senior Environmental Scientist

cc: John A. MacLeod, Town of Weymouth
MassDEP SERO, Division of Wetlands

Job No: 19.06023.00

Weymouth, Massachusetts

Wharf Street Incinerator Demolition

87 Wharf Street

May 2021

NOTICE OF INTENT



BETA

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

Wharf Street Incinerator Demolition

Weymouth, Massachusetts

87 Wharf Street

NOTICE OF INTENT

Prepared by: BETA GROUP, INC.

Prepared for: The Town of Weymouth

May 2021

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Weymouth, 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

Weymouth
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):

<u>87 Wharf Street</u>	<u>Weymouth</u>	<u>02189</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:		
<u>42.222663</u>		
d. Latitude		<u>-70.924262</u>
e. Longitude		
<u>Map 19</u>	<u>172-2</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>John</u>	<u>MacLeod</u>	
a. First Name	b. Last Name	
<u>Town of Weymouth</u>		
c. Organization		
<u>75 Middle Street</u>		
d. Street Address		
<u>Weymouth</u>	<u>MA</u>	<u>02189</u>
e. City/Town	f. State	g. Zip Code
<u>781-335-2000</u>	<u>jmacleod@weymouth.ma.us</u>	
h. Phone Number	i. Fax Number	j. Email Address

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

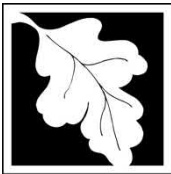
<u> </u>	<u> </u>	
a. First Name	b. Last Name	
<u>Town of Weymouth</u>		
c. Organization		
<u>75 Middle Street</u>		
d. Street Address		
<u>Weymouth</u>	<u>MA</u>	<u>02189</u>
e. City/Town	f. State	g. Zip Code
<u> </u>	<u> </u>	<u> </u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Laura</u>	<u>Krause</u>	
a. First Name	b. Last Name	
<u>BETA Group, Inc.</u>		
c. Company		
<u>89 Shrewsbury Street</u>		
d. Street Address		
<u>Worcester</u>	<u>MA</u>	<u>01604</u>
e. City/Town	f. State	g. Zip Code
<u>508-756-1600</u>	<u>lkrause@BETA-Inc.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>Fee Exempt</u>	<u>Fee Exempt</u>	<u>Fee Exempt</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
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A. General Information (continued)

6. General Project Description:

Proposed work includes the abatement and demolition of the incinerator, removal of bituminous concrete surfaces, abandonment of drainage infrastructure, removal of fill piles, maintenance of a stormwater basin, and grading/seeding.

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

- | | |
|---|---|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input checked="" type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> 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)

2. Limited Project Type

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:

Norfolk

a. County

3792

c. Book

b. Certificate # (if registered land)

397

d. Page Number

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

- 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.
- 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.



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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 type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet	2. square feet
	3. cubic yards dredged	

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

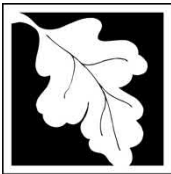
a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

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.



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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.

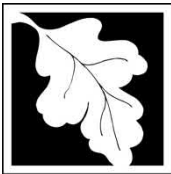
a. square feet of BVW

b. square feet of Salt Marsh

5. Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings



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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

- 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 2017
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*

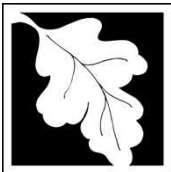
- Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
- Assessor's Map or right-of-way plan of site

- 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
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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:

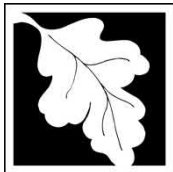
Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

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:

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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

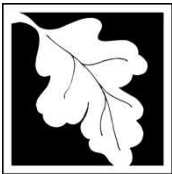
- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

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.

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



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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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.

Weymouth Incinerator Building Hazardous Materials Abatement and Demolition

a. Plan Title

BETA Group, Inc.

Phillip Paradis, P.E.

b. Prepared By

c. Signed and Stamped by

May 2021

As noted

d. Final Revision Date

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:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payor name on check: First Name

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
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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.

<p></p> <p>1. Signature of Applicant</p>	<p>04/29/2021</p> <p>2. Date</p>
<p></p> <p>3. Signature of Property Owner (if different)</p>	<p>4. Date</p>
<p></p> <p>5. Signature of Representative (if any)</p>	<p>5/3/2021</p> <p>6. Date</p>

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.

LOCAL NOI FORMS

NOTICE OF INTENT
UNDER THE TOWN OF WEYMOUTH
WETLANDS PROTECTION ORDINANCE, CHAPTER 7, SECTION 301

1. Project Location 87 Wharf Street
2. Town of Weymouth Atlas Reference (Parcel #) Map 19, Parcel 172-2
3. Project Description Demolition of an existing incinerator and subsequent restoration.
4. County, Norfolk: Book 3792 Page 397
5. *Applicant John MacLeod, Town of Weymouth *Telephone# 781-335-2000
6. *Applicant Address 75 Middle Street, Weymouth MA 02189
7. Property Owner Town of Weymouth
8. Representative Laura Krause Telephone# 508-756-1600 x156
9. Representative's Address 89 Shrewsbury Street, Worcester, MA 01604
10. Billing Party for Legal Notice (All info is required):
Name: John MacLeod
Address: 75 Middle Street, Weymouth, MA 02189
Home Phone: 781-335-2000 Cell: 781-335-2000
Email address jmacleod@weymouth.ma.us
11. Has the Conservation Commission received the **original** material **plus six (6) copies** of the Notice of Intent form, 8.5"X11", U.S.G.S. locus and 8.5"x11" sheet clearly showing the proposed site and work in addition to labeled resource areas? YES NO
12. Are the following additional interests relevant to the proposed project? If so, Notice of Intent must include a discussion of these interests. Aesthetics Wildlife Recreation Erosion Control
13. Have you filed your Local Wetland Fees? State Fees? YES NO - fee exempt
14. Have you filed the Abutters' Notification and Affidavit of Service? YES NO

I, THE UNDERSIGNED, HEREBY APPLY FOR A PERMIT PURSUANT TO THE CODE OF ORDINANCES, TOWN OF WEYMOUTH, CHAPTER 7, SECTION 301



Signature

07/29/2021

Date

*THE WEYMOUTH CONSERVATION OFFICE WILL SUBMIT THE NECESSARY LEGAL AD, AND THE APPLICANT WILL BE BILLED DIRECTLY BY THE PATRIOT LEDGER. FOR BILLING PURPOSES, THE PATRIOT LEDGER REQUIRES THAT THE TELEPHONE NUMBER SUBMITTED MUST BE THE DIRECT CONTACT NUMBER THAT MATCHES THE NAME AND ADDRESS OF THE APPLICANT, OTHERWISE THE LEGAL AD WILL NOT BE PUBLISHED AND THE HEARING WILL BE DELAYED.

SITE ACCESS AUTHORIZATION

DATE: May 7, 2021

PROJECT: Demolition of the Weymouth Incinerator.

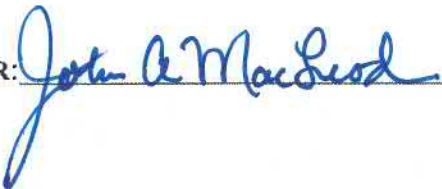
TO: **Weymouth Conservation Commission and Conservation Administrator**

FROM: Town of Weymouth (John MacLeod)

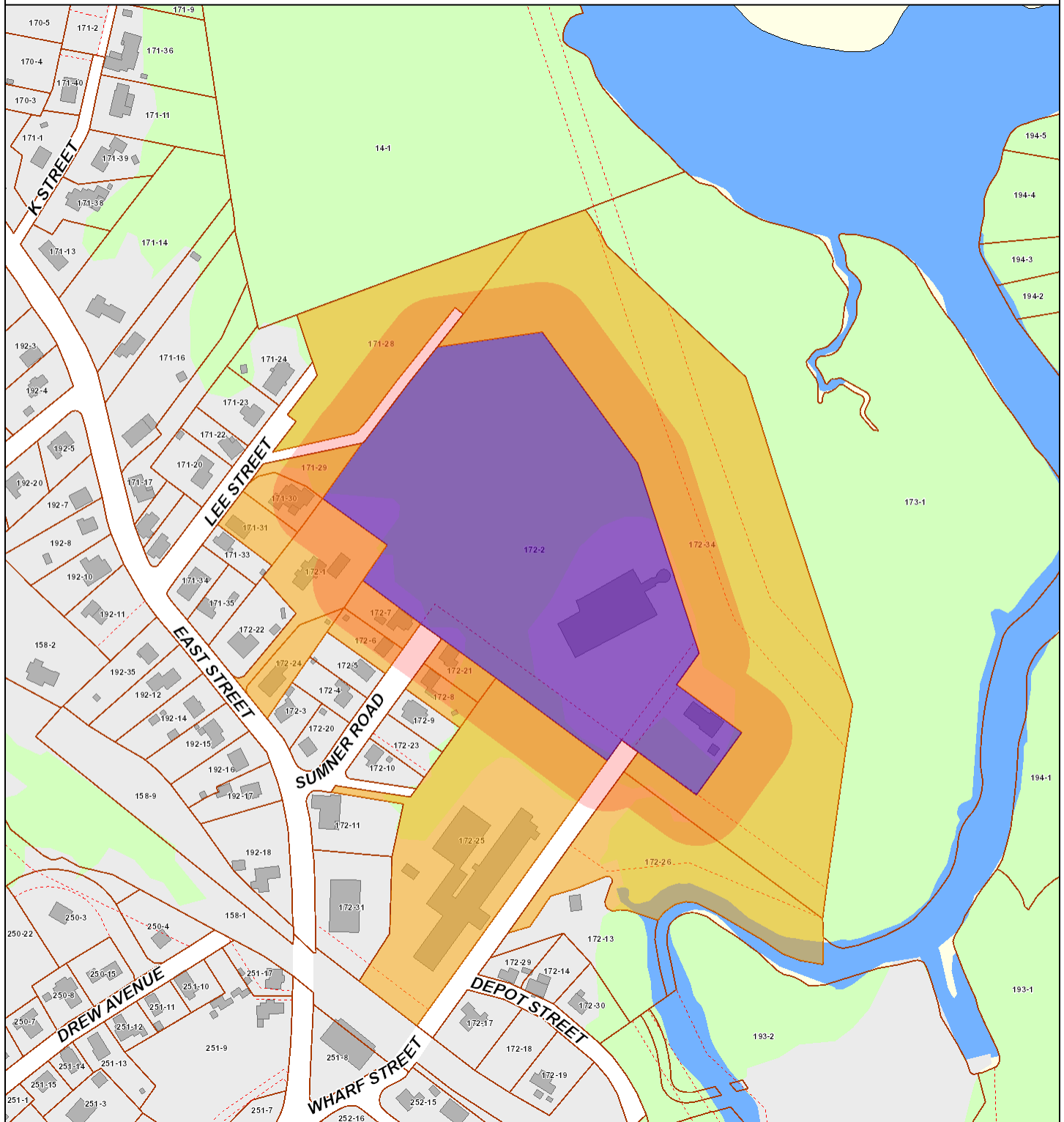
LOCATION: 87 Wharf Street
(Hereafter referred to as the property)

I (We) hereby authorize the individual members of the Conservation Commission and its agents to enter upon the property for the purpose of gathering information prior to issuing a Determination of Applicability or an Order of Conditions and for the purpose of enforcing the Order of Conditions prior to the issuance of a Certificate of Compliance.

TIME: FROM THE PRESENT TO DATE OF ISSUANCE OF CERTIFICATE OF COMPLIANCE

PROPERTY OWNER:  DATE: 04/29/2021

ABUTTERS INFORMATION



- Easemen
- Assessors Parcels
- Buildings
 - BUILDING
 - DECK
 - OTHER
 - SHED
- Base Map
 - Roads - Layout
 - PUB/PRIV TRAVELWAYS
 - PAPER
 - Hydrography
 - Streams
 - Ponds / Major Streams
 - Towns
 - Built-Up Areas

1" = 279 ft



DISCLAIMER: ALL DATA IS PROVIDED "AS IS" WITH ALL FEATURES, IF ANY. THE TOWN OF WEYMOUTH EXPRESSLY DISCLAIMS ALL WARRANTIES OF ANY TYPE, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY AS TO THE ACCURACY OF THE DATA, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

4/27/2021

PARCEL #	LOCATION	OWNER NAME/ADDRESS	CERTIFIED	
			YES	NO
MAP: 19 BLOCK: 172 LOT: 1 EXT: 0	506 EAST ST	ALEMIAN HIGE & CARRIE TRS ALEMIAN 506 EAST ST FAM TRUST 514 EAST ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 24 EXT: 0	514 EAST ST	ALEMIAN HIGE & CARRIE TRS ALEMIAN 514 EAST ST REALTY TR 514 EAST ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 171 LOT: 29 EXT: 0	0-REAR LEE ST	TOWN OF WEYMOUTH 75 MIDDLE ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 171 LOT: 31 EXT: 0	15 LEE ST	PRIOR TRAVIS & SMITH MICHELLE JT 15 LEE ST WEYMOUTH, MA, 02188	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 171 LOT: 30 EXT: 0	23 LEE ST	HARDING THOMAS L JR & MILDRED TBE 23 LEE ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 15 BLOCK: 171 LOT: 28 EXT: 0	37 LEE ST	TOWN OF WEYMOUTH PARK DEPT 75 MIDDLE ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 8 EXT: 0	21 SUMNER RD	REILLY DANNY J & KERRY TBE 21 SUMNER RD WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 6 EXT: 0	22 SUMNER RD	CALDICOTT DEBRA A 22 SUMNER RD WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 7 EXT: 0	26 SUMNER RD	FLYNN MARIA K 26 SUMNER RD WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 21 EXT: 0	27 SUMNER RD	BARBIERE JOSEPH & MARY LFE EST NORIAN D & DETOMMASO D 27 SUMNER RD E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4/27/2021

PARCEL #	LOCATION	OWNER NAME/ADDRESS	CERTIFIED	
			YES	NO
MAP: 19 BLOCK: 172 LOT: 26 EXT: 0	0 WHARF ST	FRANCER MFG & SUPPLY CO 44 WHARF STREET E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 34 EXT: 0	0 WHARF ST	TOWN OF WEYMOUTH PARK DEPT 75 MIDDLE ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 25 EXT: 0	44 WHARF ST	FRANCER MFG & SUPPLY CO 44 WHARF ST WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MAP: 19 BLOCK: 172 LOT: 2 EXT: 0	87-88 WHARF ST	TOWN OF WEYMOUTH 75 MIDDLE ST E WEYMOUTH, MA, 02189	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This list of abutters is a certified copy of the Town of Weymouth's tax records for fiscal year 2021.
 The record of ownership is accurate through October 2020.

Prepared by:

Reviewed by:

|

TOWN OF WEYMOUTH

NOTIFICATION TO ABUTTERS UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT AND
LOCAL WETLANDS PROTECTION ORDINANCE, CHAPTER 7, SECTION 301

Revision for Remote Meetings during COVID-19 State of Emergency

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following:

- A. The name of the applicant is John MacLeod, Town of Weymouth
-
- B. The applicant has filed: Notice of Intent, *or* OOC Amendment Request, *or* Request for Determination with the Conservation Commission for the municipality of Weymouth seeking permission to remove, fill, dredge or alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40).
- C. The address of the lot where the activity is proposed and a brief description including square footage and/or dimensions of proposed project:
The Project proposes the hazardous materials abatement and demolition
of the Weymouth Incinerator at 87 Wharf Street, as well as the
subsequent restoration of the area with loam and seed.
-
- D. Copies of the Notice of Intent or OOC Amendment Request or Request for Determination may be examined at Town Hall, 75 Middle Street, Conservation Office, 3rd floor (it is recommended to call for an appointment first at 781-340-5007). Copies may also be viewed on the Town of Weymouth website, on the Conservation Commission webpage, in the Current and Past Cases tab at:
<https://www.weymouth.ma.us/conservation-commission/pages/project-documents>
- E. Copies of the Notice of Intent or OOC Amendment Request or Request for Determination may be obtained from (check one):
 the Applicant **or** the Applicant's Representative
by calling this telephone number 508-756-1600x156 contact person Laura Krause
between the hours of: 8:00AM - 5:00PM on the following days of the week: Monday - Friday
- F. Information regarding the date, time, and instructions for joining the REMOTE public hearing, to be held via the WebEx platform, may be obtained from:
Weymouth Conservation Commission
- By calling this telephone number: 781-340-5007
Between the hours of: 8:30 – 4:30 Mon. though Friday

Instructions for joining the remote public hearing, via the WebEx website or via telephone, will be included on the meeting agenda, which will be posted on the Conservation Commission webpage at least 48 hours prior to the meeting, at: <https://www.weymouth.ma.us/conservation-commission>

NOTE: Notice of the public hearing/meeting, including its date, time and remote venue, will be published at least five days in advance in the Patriot Ledger, and will also be posted on the Town website at www.weymouth.ma.us not less than forty-eight hours in advance. You may also contact the Weymouth Conservation Commission or the Department of Environment Protection Regional office for more information about this application or the Wetland Protection Act. To contact DEP, call 508-946-2700.

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act and
Code of Ordinances, Town of Weymouth, Chapter 7, Section 301

(To be submitted to the Massachusetts Department of Environmental Protection and the **Weymouth Conservation Commission** when filing a Notice of Intent or Request for Determination)

I Tyler Drew hereby certify under the
pains and penalties of perjury that on 5/7/21 (date)
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, and **Town of Weymouth**, in connection
with the following matter:

A Notice of Intent or Request for Determination filed under the Massachusetts
Wetlands Protection Act by

John MacLeod, Town of Weymouth

With the **Town of Weymouth Conservation Commission** on 5/7/21
(Date)

For property located at 87 Wharf Street

Shown on Assessors Map# 19 Block # 172 Lot# 2

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

Tyler Drew
Name

5/7/21
Date

NARRATIVE

1.0 INTRODUCTION

On behalf of the Town of Weymouth, BETA Group, Inc. is submitting a Notice of Intent (NOI) for site work associated with the demolition of the Wharf Street incinerator at 87 Wharf Street in Weymouth, Massachusetts, further identified as Weymouth Assessor Parcel 9-172-2 (the Site). The Project consists of the demolition of the incinerator and appurtenances, and the restoration of the Site. More specifically, the Project will entail the abatement of hazardous materials and demolition of structures associated with the incinerator, removal of bituminous concrete surfaces, abandonment of drainage infrastructure, removal of fill piles, maintenance of a stormwater basin, and grading/seeding.

Portions of the work associated with the Project will take place within Areas Subject to Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its Regulations (the Act) as well as the Town of Weymouth Wetlands Protection Ordinance (Section 7-300) and its Regulations (the Ordinance), which includes the Ordinance 100-foot Buffer Zone to Land Subject to Coastal Storm Flowage and the Act/Ordinance 100-foot Buffer Zone to Salt Marsh. Work within Jurisdiction primarily consists of the removal of bituminous surfaces and the installation of fencing/erosion control measures. A comprehensive erosion and sedimentation control plan will be implemented to prevent the migration of sediment, debris, and contaminated materials towards the downgradient Resource Areas and the Weymouth Back River Area of Critical Environmental Concern (ACEC).

The Project will result in post-demolition conditions that will integrate with the adjacent ACEC and Great Esker Park. The footprint of the incinerator and appurtenances will be graded and stabilized with loam and seed, and the property will remain open for public access. All materials removed from the Site will be disposed of in accordance with all applicable local, state, and federal regulations.

2.0 SITE DESCRIPTION

The Site consists of the Town of Weymouth-owned incinerator and immediate surrounding area (Figure 1 – Site Locus). The Site is bounded to the north by Greater Esker Park, to the west by residential development, to the south by Wharf Street, and to the east by the Back River Salt Marsh Conservation Area. Existing improvements at the Site include an incinerator, bituminous surfaces, drainage infrastructure, fill piles, and woody vegetation. Portions of the overall parcel at 87 Wharf Street are constrained by various environmental resources including Salt Marsh and an ACEC, however, these areas do not extend into the Site (Figure 2 – Environmental Resources).

2.1 WETLAND RESOURCE AREAS

A Site inspection was conducted by a BETA Wetland Scientist on February 4, 2021 to identify and delineate the boundary of existing resource areas within and in the immediate vicinity of the Site. Resource Areas were identified in accordance with methods developed by the Massachusetts Department of Environmental Protection and Office of Coastal Zone Management's *Applying the Massachusetts Coastal Wetlands Regulations*, dated 2017, as well as definitions set forth in the Wetland Regulations, 310 CMR 10.00.

Existing Resource Areas identified near the Site include Land Subject to Coastal Storm Flowage (LSCSF), Land Subject to Tidal Actions (LSTA), Land Under the Ocean (LUO), Coastal Bank, Salt Marsh, Anadromous Fish Run, and Riverfront Area (RA), however, no Resource Areas are actually present within the limits of the Site. Based on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 25021C0231E, LSCSF is present beyond the easterly end of the Site with a base flood elevation (BFE)

of 11.2 feet (NAVD88). A complete description of areas Subject to Protection under the Act and the Ordinance is included in Appendix A (*Resource Area Boundary Delineation Report*).

2.2 BUFFER ZONES

A portion of the Project is located within the outer extents of the Act/Ordinance 100-foot Buffer Zone to Salt Marsh and the Ordinance 100-foot Buffer Zone to LSCSF. Buffer Zone consists of previously disturbed areas featuring maintained grass, bituminous surfaces, and fill.

3.0 WORK DESCRIPTION

The Project will primarily occur outside of Areas Subject to Jurisdiction. The following work will be undertaken as part of the Project:

- Installation of temporary perimeter fencing and erosion controls;
- Clearing of existing woody vegetation;
- Abatement of hazardous materials, including asbestos, associated with the incinerator;
- Demolition of the incinerator and appurtenant smokestack;
- Demolition of the basement walls and foundation;
- Removal of bituminous concrete surfaces;
- Abandonment of drainage structures;
- Maintenance of an existing stormwater basin, and;
- Restoration of the Site with loam and seed.

A crane will be staged adjacent to the incinerator to complete the demolition work following hazardous materials abatement. The nearby fill piles will be excavated and placed within the foundation hole of the incinerator for compaction and grading. Woody vegetation within the Project Area will be maintained to the extent practicable.

Bituminous surfaces surrounding the incinerator will also be removed for a total impervious area reduction of approximately 34,609 square feet. All debris will be loaded onto trucks and removed from the Site for disposal at a MassDEP-approved facility. Select drainage structures will be crushed and backfilled, and any associated inverts will be capped at the downgradient manhole. The Site will then be graded and restored. The existing stormwater basin to the northwest of the incinerator will also be maintained. Erosion controls will be implemented to protect downgradient Resource Areas throughout the duration of the Project

3.1 WORK WITHIN PROTECTED RESOURCE AREAS

Work is proposed within Buffer Zone only. Erosion control, stormwater management, and Site restoration provisions are proposed to protect Resource Areas in the vicinity of the Site.

3.2 WORK IN BUFFER ZONES

Work associated with the Project within the Ordinance 100-foot Buffer Zone to LSCSF includes:

- Removal of bituminous surfaces;
- Excavation of a fill pile;
- Clearing of woody vegetation;
- Installation of temporary fencing and erosion controls, and;
- Placement of loam and seed.

Removal of bituminous surfaces and subsequent restoration with loam and seed will result in a 980-square foot reduction in impervious area within the 100-foot Buffer Zone to LSCSF. Temporary fencing and erosion controls will be installed within the Ordinance 100-foot Buffer Zone to LSCSF and the Act/Ordinance 100-foot Buffer Zone to Salt Marsh at the southern extent of the Project. These measures will be located approximately 90 feet from the boundary of Salt Marsh at their closest point and shall be removed following completion of the Project.

4.0 MITIGATION MEASURES

4.1 EROSION AND SEDIMENTATION CONTROLS

BMPs for erosion and sedimentation control will be adhered to for all phases of construction to minimize erosion, sedimentation, and impacts to resource areas. Specific locations of erosion control measures are shown on the plan enclosed in Appendix C.

Erosion control measures will be implemented around the perimeter of the incinerator to prevent sediment and debris from migrating further into Buffer Zones or into Resource Areas. A sediment track out pad will be constructed at the entrance to the work area to prevent migration of sediment out to Wharf Street.

Perimeter erosion control measures will consist of siltation fencing embedded in the soil at a minimum depth of six (6) inches and supplemented with a compost filter tube at least twelve (12) inches in diameter. While the plans in Appendix C depict stockpile and staging areas as approximate, these areas will be located outside the Buffer Zone to downgradient Resource Areas, underlain with staked poly sheeting, and surrounded with a perimeter of compost filter tubes and siltation fencing. Any catch basins within that vicinity of the Project that will remain will be surrounded with compost filter tubes and fitted with inlet protection measures (i.e. Siltsacks).

Erosion controls will remain in place and in proper working order until the Site is completely stabilized. A stockpile of erosion control materials will be kept onsite for emergency and routine replacement. Though much of the impervious area removal will occur outside of Buffer Zone, all of these areas will be seeded and monitored to prevent sediment migration.

4.2 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 occur within existing developed and degraded areas. Redevelopment projects are required to meet Standards 1 and 7 through 10 fully; and, Standards 2 through 6 only to the maximum extent practicable. Appendix B – Stormwater Management Report and Checklist provides further details on compliance with the applicable Massachusetts Stormwater Management Standards.

The Project will maintain erosion control BMPs for the duration of construction and will result in an approximately 34,609-square foot decrease in impervious area at the Site. In addition, the Operation and Maintenance (O&M) Plan in Appendix B provides provisions for maintaining the stormwater basin adjacent to the incinerator.

4.3 SITE RESTORATION

The approximately 34,609 square feet of impervious area to be removed from the Site will be graded following demolition activities. These areas will be topped with at least 4 inches of clean loam and seeded with an approved seed mixture. The grading will generally maintain existing stormwater runoff paths, and

the decrease in impervious area will increase groundwater recharge at the Site. Jute netting will be used to assist in stabilizing these areas if any signs of erosion are observed following the application of seed.

It is anticipated that additional impervious areas may be uncovered when excavating the fill piles. In this case, the impervious areas will be removed and stabilized as described above.

5.0 REGULATORY COMPLIANCE

The Project will not occur within Resource Areas but will adhere to the Performance Standards set forth by the Ordinance.

5.1 MASSACHUSETTS WETLANDS PROTECTION ACT AND REGULATIONS

The Project does not propose any impacts to Areas Subject to Protection under the Act. Erosion control measures upgradient of the onsite Salt Marsh and LSCSF will prevent migration of sediment and debris into Resource Areas. In addition, the reduction of impervious area at the Site will increase groundwater recharge and improve the water quality of stormwater draining towards Resource Areas.

5.2 TOWN OF WEYMOUTH WETLANDS PROTECTION ORDINANCE AND REGULATIONS

While no work is proposed within Resource Areas, the Ordinance Regulations set forth Performance Standards that must be met by Projects occurring adjacent to Resource Areas.

5.2.1 SALT MARSH PERFORMANCE STANDARDS

With the exception of the maintenance of an existing structure, no alterations are permitted within 50 feet of a Salt Marsh per Section 2.06(3) of the Ordinance Regulations¹. The proposed Project involves the demolition of an existing structure and will take place over 100 feet from the boundary of Salt Marsh. In addition, stockpiling and staging operations will occur outside of the Buffer Zone to Salt Marsh. Work within Buffer Zone to Salt Marsh consists solely of a small portion of the fencing and erosion control installation at the southern extent of the limit of work

5.2.2 AREA OF CRITICAL ENVIRONMENTAL CONCERN PERFORMANCE STANDARDS

According to Section 9.00(4)(2), activities occurring adjacent to an ACEC must have no effect on the Resource Areas within said ACEC². Resource Areas within the ACEC will be protected throughout the Project by erosion and sediment control measures described herein. The Project result in a decrease in impervious area adjacent to the ACEC, thereby promoting increased groundwater recharge and improved water quality adjacent to and within the ACEC.

5.2.3 INTERESTS OF THE ORDINANCE

In accordance with the requirements of the local NOI form, the following interests identified in the Ordinance will be supported by the Project:

¹ Section 2.06(3): No activity, other than the maintenance of an already existing structure, which will result in the building within or upon dredging, removing, filling, or altering of a salt marsh or land within 50 feet of any salt marsh shall be permitted by the Conservation Commission, except for activity which is allowed under a waiver from these regulations granted pursuant to Section 5.01.

² Section 9.00(4)(2): The standard of performance that must be met by proposed development activities in and adjacent to an ACEC is "no adverse effect" – 310 CMR show, using credible evidence from a competent source, that the proposed activity will have no adverse effect on the ACEC resources.

Aesthetics

The aesthetics interest of the Ordinance will be upheld by removing a blighted incinerator from an area that is adjacent to an otherwise picturesque scene of a coastal river and Salt Marsh. The proposed conditions will be consistent with the remainder of the Great Esker Park and will integrate more appropriately with the open space experience that individuals seek when visiting this public park.

Wildlife

The removal of the incinerator and associated impervious areas will improve water quality of runoff that drains towards the Back River, thereby supporting an improvement to conditions within the Back River, which is a mapped Anadromous Fish Run. In addition, the absence of the incinerator will provide additional areas for small mammals to burrow and will provide additional space for ground-nesting birds such as the killdeer (*Charadrius vociferus*).

Recreation

The recreation interest of the Ordinance will be upheld by the Project through improvement to a publicly accessible space. Visitors that use the Site for walking, running, and cycling will benefit from the improved aesthetics and reduction of hazardous materials that will result from the Project.

Erosion Control

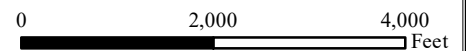
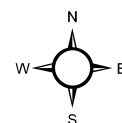
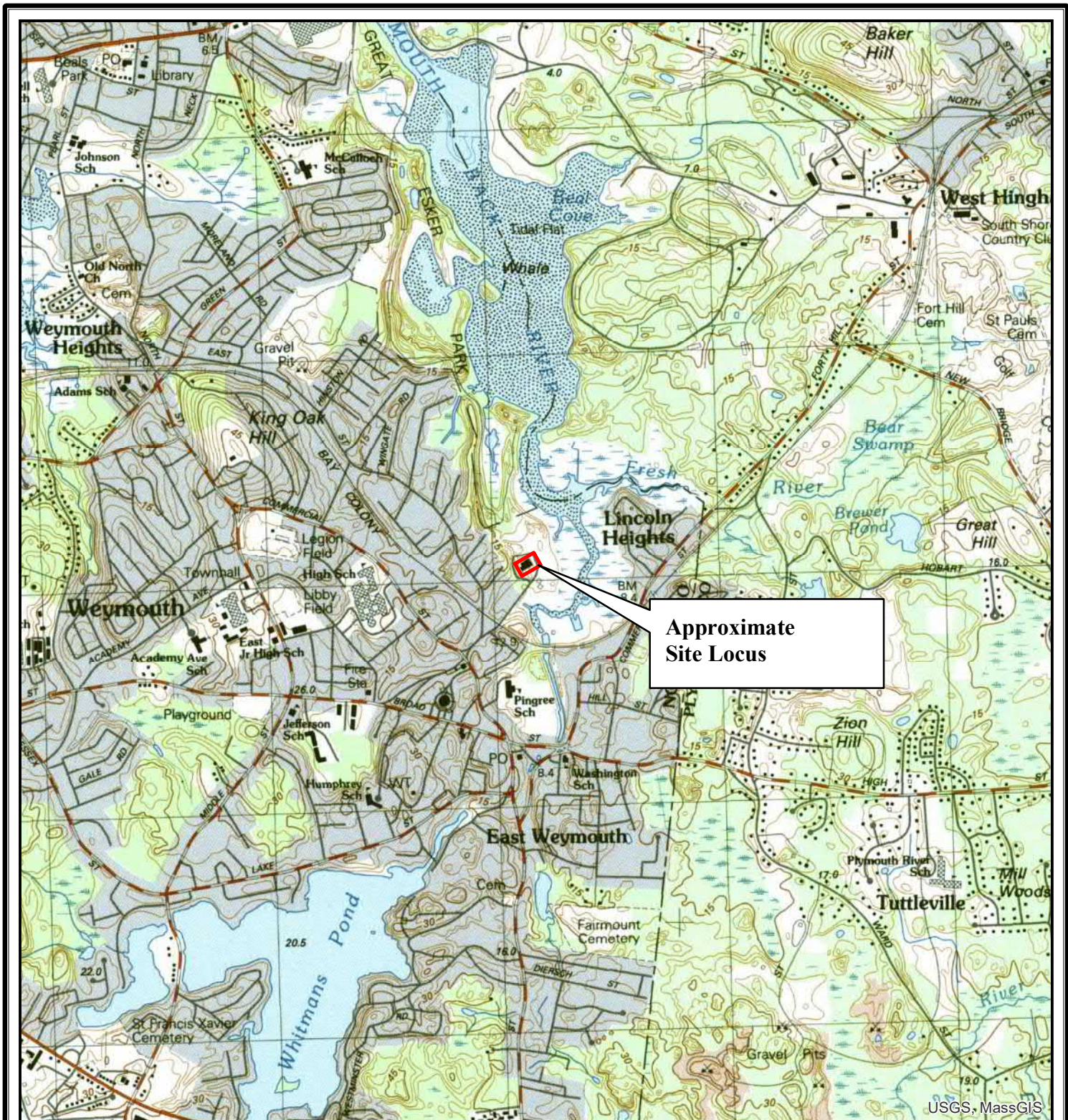
Demolition of the incinerator and subsequent restoration will remove 34,609 square feet of impervious area from the Site and replace it with loam and seed. This will diminish the peak rate flow of stormwater leaving the Site, increase groundwater recharge, and reduce potential sources of pollutants. During the period of work, erosion control measures will be implemented as detailed herein to prevent erosion and sedimentation at the Site.

6.0 SUMMARY

The proposed Project will provide an improvement over existing conditions at the Site by reducing the total area of impervious surfaces and disposing of hazardous materials in accordance with local, state, and federal regulations. Erosion controls will be maintained throughout the Project to protect nearby Resource Areas, and the proposed restoration will integrate with the surrounding land use. Both the surrounding environment and the users of the adjacent Great Esker Park will benefit from the removal of the incinerator, which will improve environmental conditions.

The Project Team feels the Commission has sufficient information to describe the site, the work, and the effect of the work on the interests identified in the Act and the Ordinance.

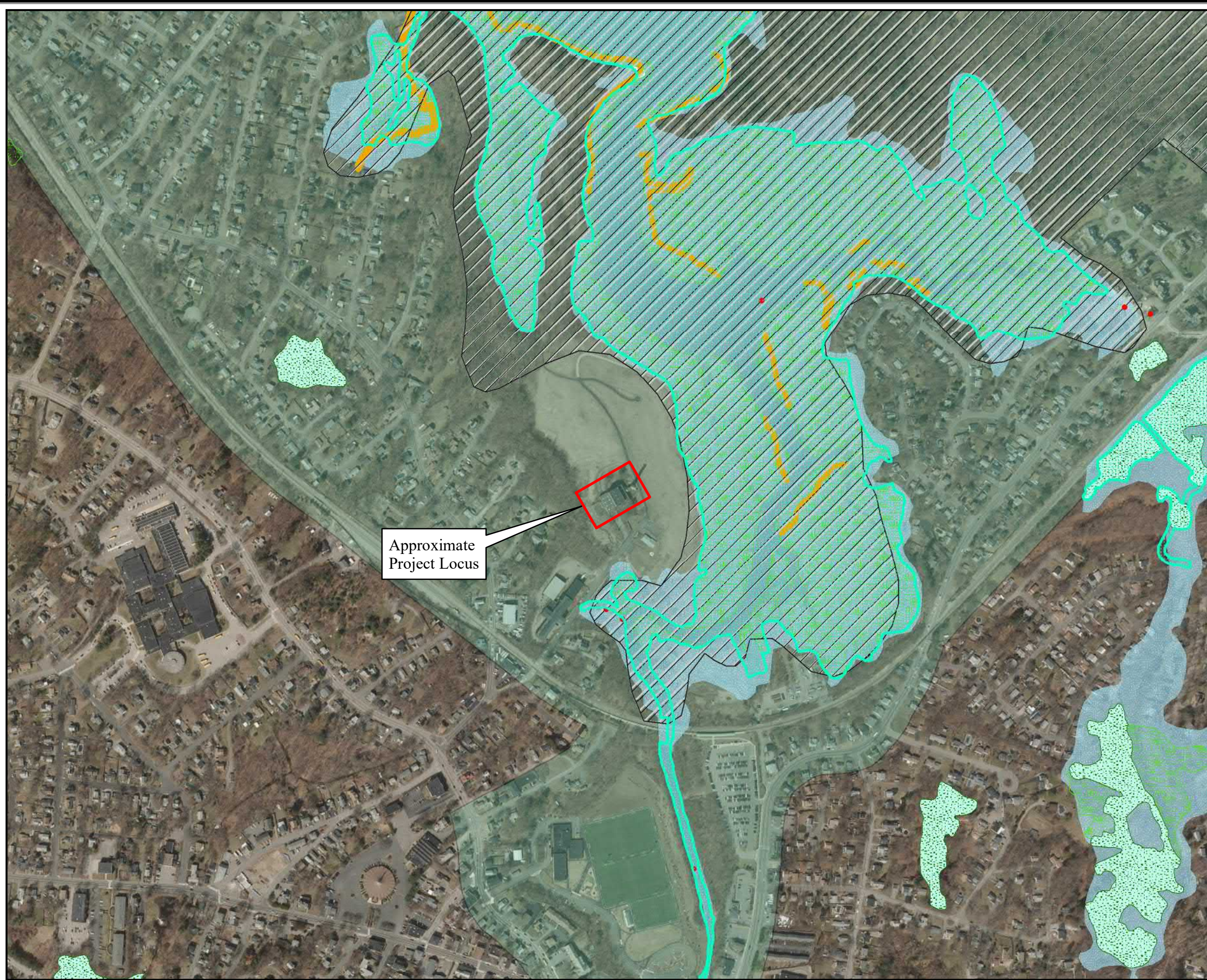
FIGURES



1 inch = 2,000 feet

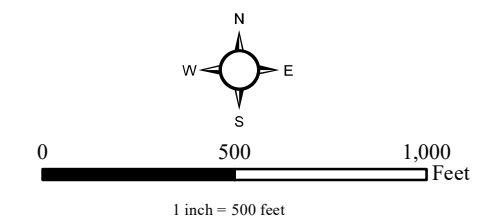
Figure 1
Site Locus
Wharf Street Incinerator Demolition
Weymouth, MA

Figure 2
Environmental Resources Map
Wharf Street Incinerator Demolition
Weymouth, MA



- Wetland Resources Legend**
- Inland Wetlands
 - Barrier Beach
 - Coastal Beach/Coastal Dune
 - Deep Marsh
 - Salt Marsh
 - NFHL 100 Year Flood Zone
 - Outstanding Resource Water
 - Area of Critical Environmental Concern (ACEC)
 - CZM Coastal Zone
 - Anadromous Fish Presence
 - Chapter 91 Jurisdiction

Approximate
Project Locus



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



70°55'46"W 42°13'35"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		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 Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
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
		8 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
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 1/25/2021 at 11:38 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.

Photographic Documentation

Photo 1



View of fill piles south of the incinerator building—facing northwest.

Photo 2



View of the incinerator from the south—facing north.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

Photo 3



View of the stormwater basin to the northeast of the incinerator—facing south.

Photo 4



View of the incinerator and adjacent stack—facing southeast.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

Photo 5



View of the on-site Salt Marsh—facing south.

Photo 6



View of the stream flowing from under Wharf Street to the Back River—facing west.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

Photo 7



View of a sewer manhole adjacent to the stream shown in Photo 6—facing west.

Photo 8



View of the dense stand of phragmites (*Phragmites australis*) within the Salt Marsh—facing southwest.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

APPENDIX A – Resource Area Delineation Report

**Resource Area Delineation
Wharf Street Incinerator
Weymouth, Massachusetts**

May 5, 2021

On February 4, 2021 BETA Group, Inc. (BETA) conducted a Resource Area identification, assessment, and delineation at 87 Wharf Street in Weymouth, Massachusetts (the Site). This report describes resource areas Subject to Protection under the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131 Section 40 - the Act), the Town of Weymouth Wetlands Protection Ordinance (Section 7-301 – the Ordinance), the federal Clean Water Act CFR (33 U.S.C. §1251 et seq (1972)), the federal Rivers and Harbors Act (33 U.S.C. 403 (1899)), and the Massachusetts Clean Waters Act (MGL Chapter 21 Section 26-53), that exist on the Site and methodology used to delineate their boundaries.

Site Description

The Site consists of a Town of Weymouth-owned incinerator and the immediate area within the parcel located at 87 Wharf Street (Figure 1 – Site Locus). The Site is bounded to the north by Greater Esker Park, to the west by residential development, to the south by Wharf Street, and to the east by the Back River Salt Marsh Conservation Area. Existing improvements at the Site include an incinerator, bituminous areas, and various utilities. Portions of the overall parcel are constrained by various environmental resources (Figure 2 – Environmental Resources).

According to the USDA Natural Resources Conservation Service – Soil Survey, mapped soils on the Site and in the vicinity of the Site are classified as Ipswich mucky peat; Hinckley loamy sand; Urban land, and; Udorthents, refuse substratum. Our field work confirmed the soil types on the Site. The Custom Soil Resource Report for Norfolk and Suffolk Counties, Massachusetts is attached.

State Jurisdictional Resource Areas identified on and near the Site include Land Subject to Coastal Storm Flowage (LSCSF), Land Subject to Tidal Actions (LSTA), Land Under the Ocean (LUO), Coastal Bank, Salt Marsh, Anadromous Fish Run, and Riverfront Area (RA). The MassGIS database was used as the initial step in identifying critical areas on or within proximity of the site that would be examined more closely if construction activities are proposed. The table below describes selected environmentally critical categories as determined through MassGIS.

Table 1. Selected MassGIS Environmental Data Layers

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	✓*	
Surface Water Protection Area (Zones A and B)		✓
Interim Wellhead Protection Area		✓
Zone II Wellhead Protection Area		✓
Tidelands – Chapter 91 Jurisdiction	✓*	

Mapped Resource on or Within Proximity to Site	Yes	No
Designated Port Area		✓
CZM Coastal Zone	✓	
Anadromous Fish Presence	✓*	
Land Containing Shellfish		✓

*These areas are not located within the Site; however, they are located in proximity to the Site.

Source: MassGIS

Jurisdictional Wetland Resource Areas – Massachusetts Wetlands Protection Act

A Site inspection was conducted by BETA’s Wetland Scientists on February 4, 2021 to identify and delineate existing Resource Areas at and near the Site. Resource Areas were identified in accordance with methods developed by the Massachusetts Department of Environmental Protection and Office of Coastal Zone Management’s *Applying the Massachusetts Coastal Wetlands Regulations*, dated 2017, as well as definitions set forth in the Wetland Regulations, 310 CMR 10.00. Several Areas Subject to Protection under the Act exist on the Site and are described below.

Land Subject to Coastal Storm Flowage – FEMA AE and VE Zones – 310 CMR 10.04

According to the FEMA Flood Insurance Rate Map (FIRM) community panel number 25021C0231E dated effective July 17, 2012 (Figure 3), a Flood Hazard Zone AE, subject to a 1% yearly chance of tidally influenced inundation below the published Base Flood Elevation (BFE) of 11.2 feet (NAVD88) exists to the east and south of the Site. Land below the BFE is defined as LSCSF and is subject to Jurisdiction under the Act. There are no Zone VE Flood Hazards mapped near the Site.

Land Subject to Tidal Action– 310 CMR 10.04

According to the Statement of Jurisdiction at 310 CMR 10.02 and definition at 310 CMR 10.04, LSTA is defined as land subject to the periodic rise and fall of a coastal water body, including spring tides. The landward limit of this resource area is the extreme high tide elevation (HTL).

Through review of tide charts and the Buzzards Bay National Estuary Program’s Tidal Datum Viewer, the modeled the MLW elevation per the closest observation station is -5.24 feet (NAVD88) as determined by NOAA’s VDatum software, and the HTL is 6.79 feet (NAVD88). This Resource Area generally correlates with the boundary of Salt Marsh, which is located to the south and east of the Site.

Land Under the Ocean – 310 CMR 10.26

According to 310 CMR 10.25(2), LUO is defined as the “land extending from the mean low water (MLW) line seaward to the municipality’s jurisdiction and includes estuaries”. Because the Back River is a tidal river, land under this waterbody is, by definition, LUO. According to the Buzzards Bay National Estuary Program’s Tidal Datum Viewer, the modeled the MLW elevation is approximately -5.24 feet (NAVD88) as determined by NOAA’s VDatum software. This Resource Area was not delineated in the field.

Coastal Bank – 310 CMR 10.30

The Wetland Regulations at 310 CMR 10.30(2) define Coastal Bank as the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland. Coastal Bank upgradient of the Salt Marsh exists to the south and east of the Site but is greater than 100 feet away.

Salt Marsh – 310 CMR 10.32

According to 310 CMR 10.32(2), a Salt Marsh is as a coastal wetland that extends landward up to the highest high tide line, that is, the highest spring tide of the year, and is characterized by plants that are well adapted to or prefer living in, saline soils. Salt Marsh was observed at the Site as described below in Table 2: Salt Marsh Boundary Description. The HTL per the closest observation station published on the Buzzards Bay National Estuary Program’s Tidal Datum Viewer is 6.79 feet (NAVD88). Salt Marsh flagging was located via a GPS unit with sub-meter accuracy; the ground elevations of where flags were placed was generally at or below 6.79 feet (NAVD88).

Table 2: Salt Marsh Boundary Description

Flag Series	Location	Description / Notes
<p>“WF1” Series Flags WF1-100 to WF1-119</p>	<p>Southeast of Wharf Street, along the Back River</p>	<p>Alphanumerically labeled pink flagging delineates the WF1 Series Salt Marsh. This Salt Marsh borders on the Back River and generally consists of a monoculture of Phragmites (<i>Phragmites australis</i>). A fill slope with embedded debris generally defines the outer extent of the boundary. As noted above, elevations along the boundary of the Salt Marsh generally did not exceed the HTL elevation of 6.79 feet (NAVD88). The attached U.S. Army Corps Data Form describes hydrophytic vegetation, hydric soils, and indicators of hydrology at a specific data plot.</p>

Anadromous Fish Run – 310 CMR 10.35

According to 310 CMR 10.35(2), an Anadromous/Catadromous Fish Run is an area within estuaries, ponds, streams, creeks, rivers, lakes or coastal waters, which is a spawning or feeding ground or passageway for anadromous or catadromous fish and which is identified by the Division of Marine Fisheries or has been mapped on the Coastal Atlas of the Coastal Zone Management Program. The Back River is mapped as a Fish Run for rainbow smelt (*Osmerus mordax*) and the landward limit of this resource area is the Mean High Water Elevation, which estimated at 4.24 feet (NAVD88).

Bank (Inland) – 310 CMR 10.54

According to 310 CMR 10.54(2), the definition of a Bank is the portion of the land surface which normally abuts and confines a water body, occurring between a water body and a vegetated bordering wetland and adjacent floodplain, or, in the absence of these, it occurs between a water body and an upland. The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower.

BETA delineated Inland Bank along a perennial tributary of the Back River described below in Table 2.

Table 2: Bank to Perennial Stream Boundary Description

Flag Series	Location	Description / Notes
<p>BF2 Series Flags BF2-100 to BF2-109</p>	<p>South of Site, perennial tributary to Back River</p>	<p>The BF2 Series delineates the northerly Bank/MAHW mark associated with a perennial tributary to the Back River. Both Banks of this stream were armored with manmade rock walls that confined the approximately 12-foot-wide stream channel with a gravel and sand substrate. The stream was approximately 6 inches deep on February 4, 2021 and was observed to flow</p>

Flag Series	Location	Description / Notes
		east from under Wharf Street, but an upgradient source could not be located.

Riverfront Area – 310 CMR 10.58 (Inland and Coastal)

310 CMR 10.58(2) defines RA as the area of land between a river's Mean Annual High Water (MAHW) line and a parallel line measured horizontally. MAHW associated with the inland tributary to the Back River was delineated as described above in Table 2. In addition, RA associated with the Back River, a tidal river, is present near the Site and, in accordance with 310 CMR 10.58(2)(a)2.c., the Riverfront Area boundary is measured from the MHW elevation at the Site, which is estimated as 4.24 feet (NAVD88).

Jurisdictional Wetland Resource Areas – Town of Weymouth Wetlands Protection Ordinance

The Ordinance maintains the same definition for Resource Areas as set forth under the Act, with the exception of the following terms:

Bank: Includes the land area which normally abuts and confines a water body; the lower boundary being the mean annual low flow level, and the upper boundary being the first observable break in the slope or the mean annual flood level, whichever is higher.

The Bank/MAHW delineation is coincident with the mean annual flood level. Therefore, this delineation is consistent with the Ordinance.

Pond: The term "pond" shall follow the definition of 310 CMR 10.04 except that the size threshold of 10,000 square feet shall not apply.

No ponds were observed at or near the Site.

Rare Species: Includes, without limitation, all vertebrate and invertebrate animal and plant species listed as endangered, threatened or of special concern by the Massachusetts Division of Fisheries and Wildlife, regardless of whether the site in which they occur has been previously identified by the Division.

The Site is not mapped as NHESP habitat and BETA is not aware of the presence of any species that are endangered, threatened, or of special concern.

Vernal Pool: Includes a confined basin depression which, at least in most years, holds water for a minimum of two months during the spring and/or summer, and which is free of adult fish populations, as well as the area within 100 feet of the mean annual boundary of such a depression, regardless of whether the site has been certified by the Massachusetts Division of Wildlife and Fisheries.

No vernal pools were observed at the Site.

Other protections offered by the Ordinance beyond the Jurisdiction of the Act include Isolated Vegetated Wetlands, as well as Buffer Zones afforded to Lands Subject to Flooding (Bordering and Isolated), LSCSF, and LSTA. The Ordinance also maintains an additional 50-foot interior Buffer Zone to Salt Marsh. The 100-foot Buffer Zone to LSCSF and 50-foot Buffer Zone to Salt Marsh are present at or adjacent to the Site.

Jurisdictional Wetland Resource Areas – Federal Clean Water Act (Sections 10 and 404)

The Back River and associated Salt Marsh are “Tidal Waters of the United States” and are therefore subject to the federal Rivers and Harbors Act, 33 U.S.C. 403 (1899) and the federal Clean Water Act, 33 U.S.C. 1251 et seq (1972). According to 33 CFR §328.3(d), Tidal Waters are defined as “waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.”

The boundary to “Tidal Waters of the United States” is the High Tide Line (HTL), which is defined at 33 CFR §328.3(c)(7). The boundary of the HTL can be approximated using the “King Tide” elevation, which is approximately 6.79 feet (NAVD88). Construction of any structure in, over, or under tidal waters, or work affecting the course, location, condition, or capacity of tidal waters is Subject to Jurisdiction under Section 10 of the Rivers and Harbors Act. Work that requires filling below the boundary of the HTL onsite is Subject to Jurisdiction under Sections 10 and 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 boundary of federally regulated waters. Exceedances of the jurisdictional threshold under 314 CMR 9.00 require filing for a Water Quality Certification under Section 401. Any work requiring Salt Marsh alteration requires a Water Quality Certification.

Jurisdictional Resource Areas – The Massachusetts Public Waterfront Act (Chapter 91)

Most activities that take place within Flowed Tidelands or Filled Tidelands require Chapter 91 authorization. Chapter 91 Jurisdiction exists adjacent off-site to the south and east, where Flowed Tidelands are present.

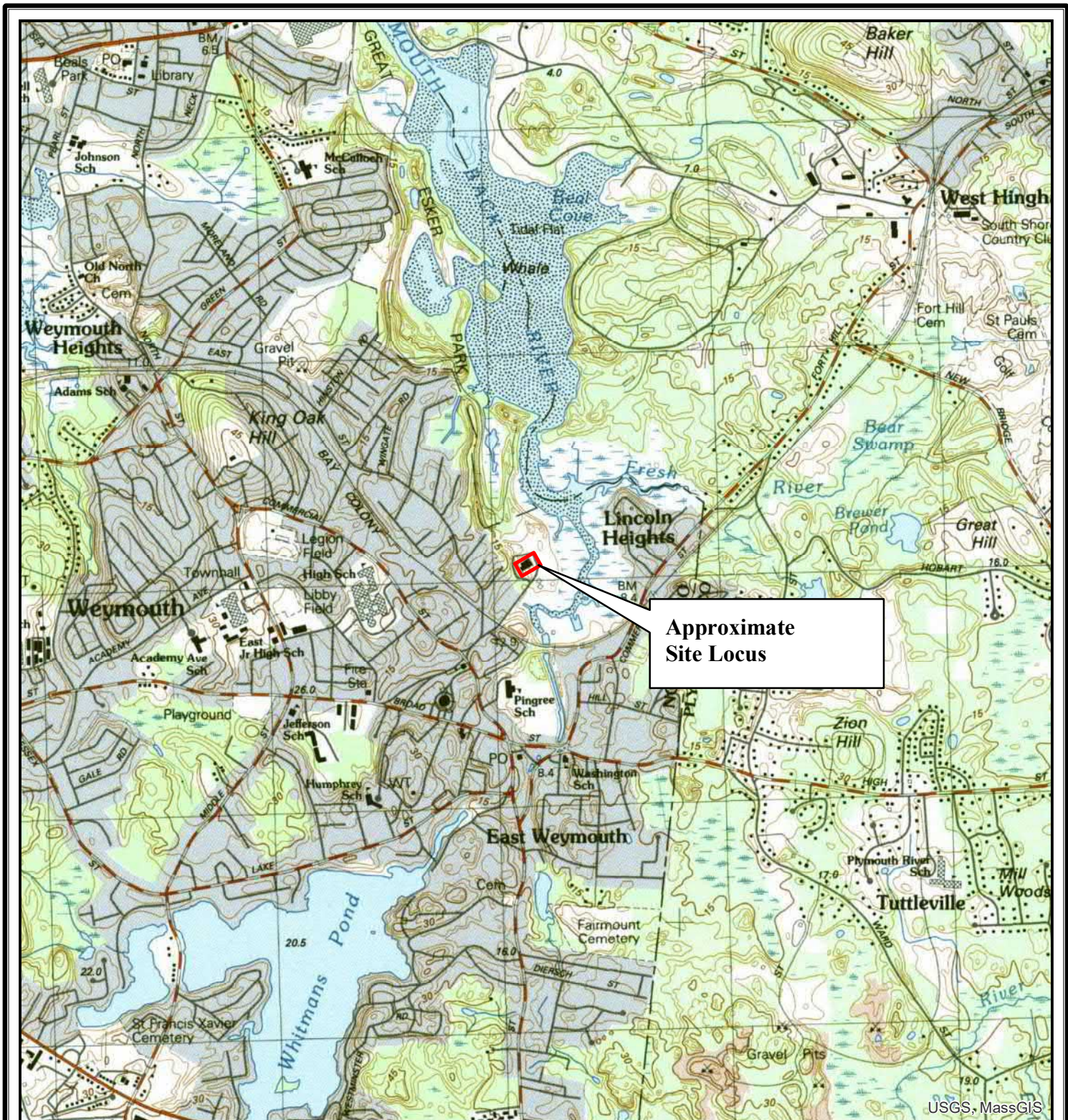
Findings and Recommendations

BETA has identified areas Subject to Protection and/or Jurisdiction under the Massachusetts Wetlands Protection Act, the Town of Weymouth Wetlands Protection Ordinance, the federal Clean Water Act, and the Massachusetts Clean Waters Act, on or within 100 feet of the Site.

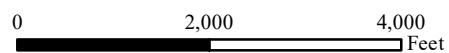
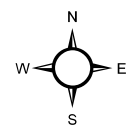
We appreciate the opportunity to provide you with expert wetland services. If you have any questions or need further assistance, please do not hesitate to call us.

Attachments: Figure 1 – Site Locus
Figure 2 – Environmental Resources Map
Figure 3 – FEMA FIRMette
Photographic Documentation
U.S. Army Corps of Engineers Field Data Sheets
Custom Soil Report for Norfolk and Suffolk Counties, Massachusetts

Job No: 19.06023.00



USGS, MassGIS

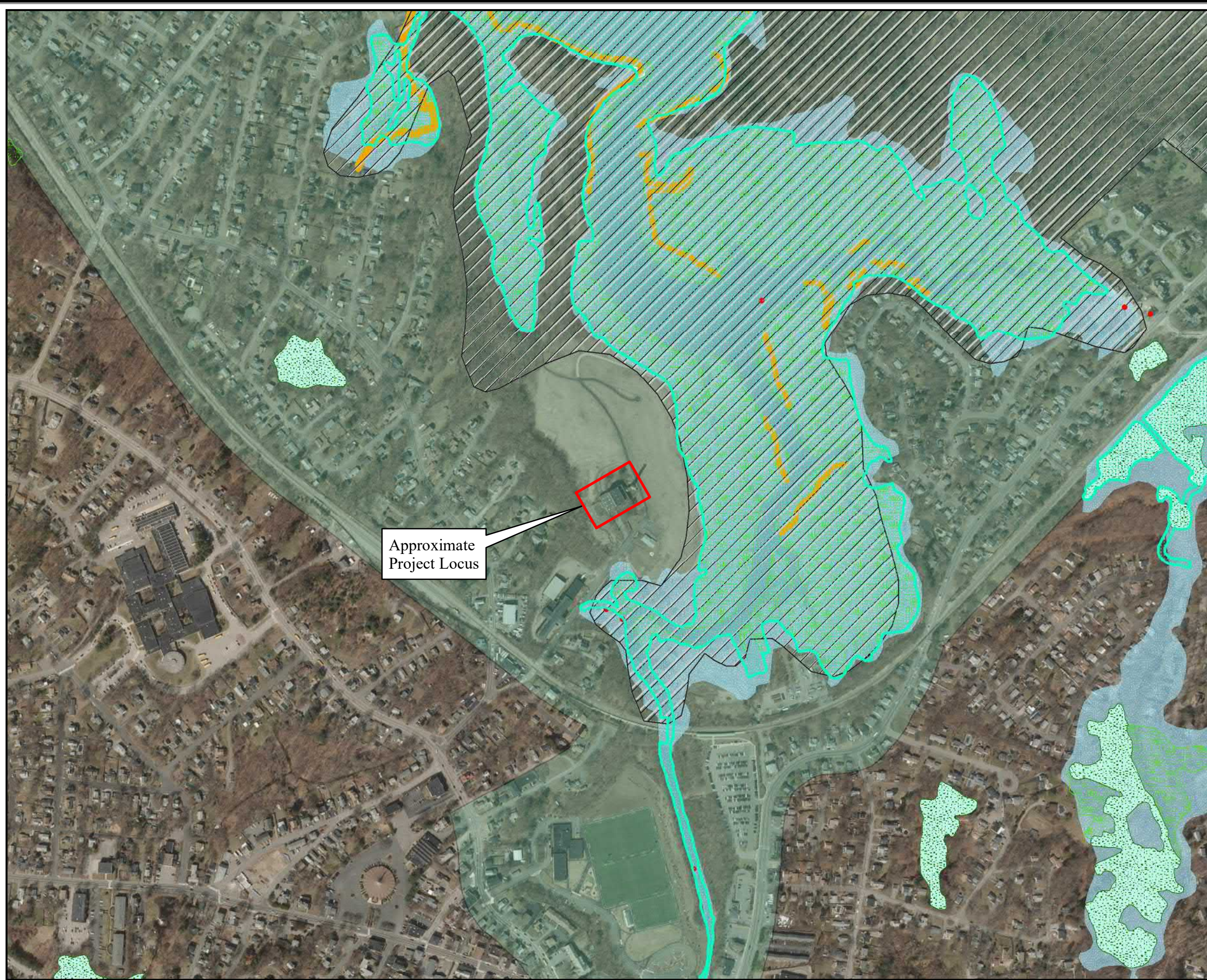


1 inch = 2,000 feet

Figure 1
Site Locus
Wharf Street Incinerator Demolition
Weymouth, MA

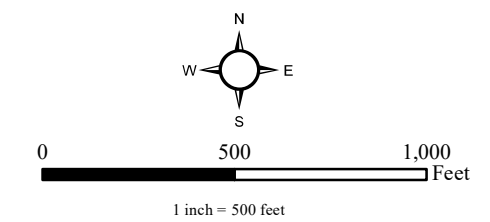
Data Source: MassGIS USGS Topographic Quadrangle Images (2001)

Figure 2
Environmental Resources Map
Wharf Street Incinerator Demolition
Weymouth, MA



- Wetland Resources Legend**
- Inland Wetlands
 - Barrier Beach
 - Coastal Beach/Coastal Dune
 - Deep Marsh
 - Salt Marsh
 - NFHL 100 Year Flood Zone
 - Outstanding Resource Water
 - Area of Critical Environmental Concern (ACEC)
 - CZM Coastal Zone
 - Anadromous Fish Presence
 - Chapter 91 Jurisdiction

Approximate
Project Locus



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



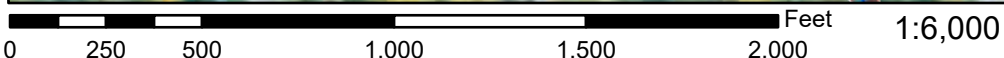
70°55'46"W 42°13'35"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		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 Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
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
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.



70°55'8"W 42°13'8"N

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

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 1/25/2021 at 11:38 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 fill piles south of the incinerator building—facing northwest.

Photo 2



View of the incinerator from the south—facing north.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

Photo 3



View of the stormwater basin to the northeast of the incinerator—facing south.

Photo 4



View of the incinerator and adjacent stack—facing southeast.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

Photo 5



View of the on-site Salt Marsh—facing south.

Photo 6



View of the stream flowing from under Wharf Street to the Back River—facing west.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

Photo 7



View of a sewer manhole adjacent to the stream shown in Photo 6—facing west.

Photo 8



View of the dense stand of phragmites (*Phragmites australis*) within the Salt Marsh—facing southwest.

PHOTOGRAPHIC DOCUMENTATION
Weymouth Incinerator Resource Area Delineation
Weymouth, Massachusetts
Photographs Documented 02.04.2021

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Weymouth Incinerator City/County: Weymouth Sampling Date: 02/04/2021
 Applicant/Owner: Town of Weymouth State: MA Sampling Point: Wetland
 Investigator(s): Jonathan Niro (BETA Group, Inc.) Section, Township, Range: Norfolk County

Landform (hillside, terrace, etc.): Toe of fill slope, floodplain Local relief (concave, convex, none): Concave Slope %: 0

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.221570 Long: -70.924022 Datum: WGS84

Soil Map Unit Name: Ipswich mucky peat, 0 to 1 percent slopes NWI classification: E1UBLx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u>WF1-103</u>
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Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) ___ Aquatic Fauna (B13) <u>X</u> Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) <u>X</u> Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) <u>X</u> Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
---	--

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>1</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30' radius</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
	=Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
5.	_____	_____	_____	
6.	_____	_____	_____	
7.	_____	_____	_____	
	=Total Cover			
Herb Stratum (Plot size: <u>5' radius</u>)				
1.	<u>Phragmites australis</u>	100	Yes	FACW
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
12.	_____	_____	_____	_____
	100 =Total Cover			
Woody Vine Stratum (Plot size: <u>15' radius</u>)				
1.	_____	_____	_____	
2.	_____	_____	_____	
3.	_____	_____	_____	
4.	_____	_____	_____	
	=Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>100</u>	x 2 = <u>200</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>100</u> (A)	<u>200</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100						Organic
4-7	10YR 3/1	100						Organic
7-10	10YR 4/1	100	7.5YR 4/6	10	C	M		Prominent redox concentrations
10-18	10YR 3/1	100	7.5YR 4/6	10	C	PL		Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Weymouth Incinerator City/County: Weymouth Sampling Date: 02/04/2021
 Applicant/Owner: Town of Weymouth State: MA Sampling Point: Upland
 Investigator(s): Jonathan Niro (BETA Group, Inc.) Section, Township, Range: Norfolk County
 Landform (hillside, terrace, etc.): Top of slope, floodplain Local relief (concave, convex, none): Convex Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.221570 Long: -70.924022 Datum: WGS84
 Soil Map Unit Name: Udorthents, refuse substratum NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u>WF1-103</u>
---	--

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ ? Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
---	---

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Upland

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30' radius</u>)																				
1. <u>Juniperus virginiana</u>	5	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>50</u> (A)</td> <td><u>195</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.90</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>50</u> (A)	<u>195</u> (B)	Prevalence Index = B/A = <u>3.90</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>35</u>	x 4 = <u>140</u>																			
UPL species <u>5</u>	x 5 = <u>25</u>																			
Column Totals: <u>50</u> (A)	<u>195</u> (B)																			
Prevalence Index = B/A = <u>3.90</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
<u>5</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15' radius</u>)																				
1. _____				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
<u> </u> =Total Cover																				
Herb Stratum (Plot size: <u>5' radius</u>)																				
1. <u>Alliaria petiolata</u>	30	Yes	FACU	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
<u>30</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>15' radius</u>)																				
1. <u>Toxicodendron radicans</u>	10	Yes	FAC	Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																
2. <u>Celastrus orbiculatus</u>	5	Yes	UPL																	
3. _____																				
4. _____																				
<u>15</u> =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 2/1	100						Stoney fill with debris, refusal @ 12"

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____ Rock _____
 Depth (inches): _____ 12 _____

Hydric Soil Present? Yes _____ No X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)



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 Norfolk and Suffolk Counties, 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.

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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

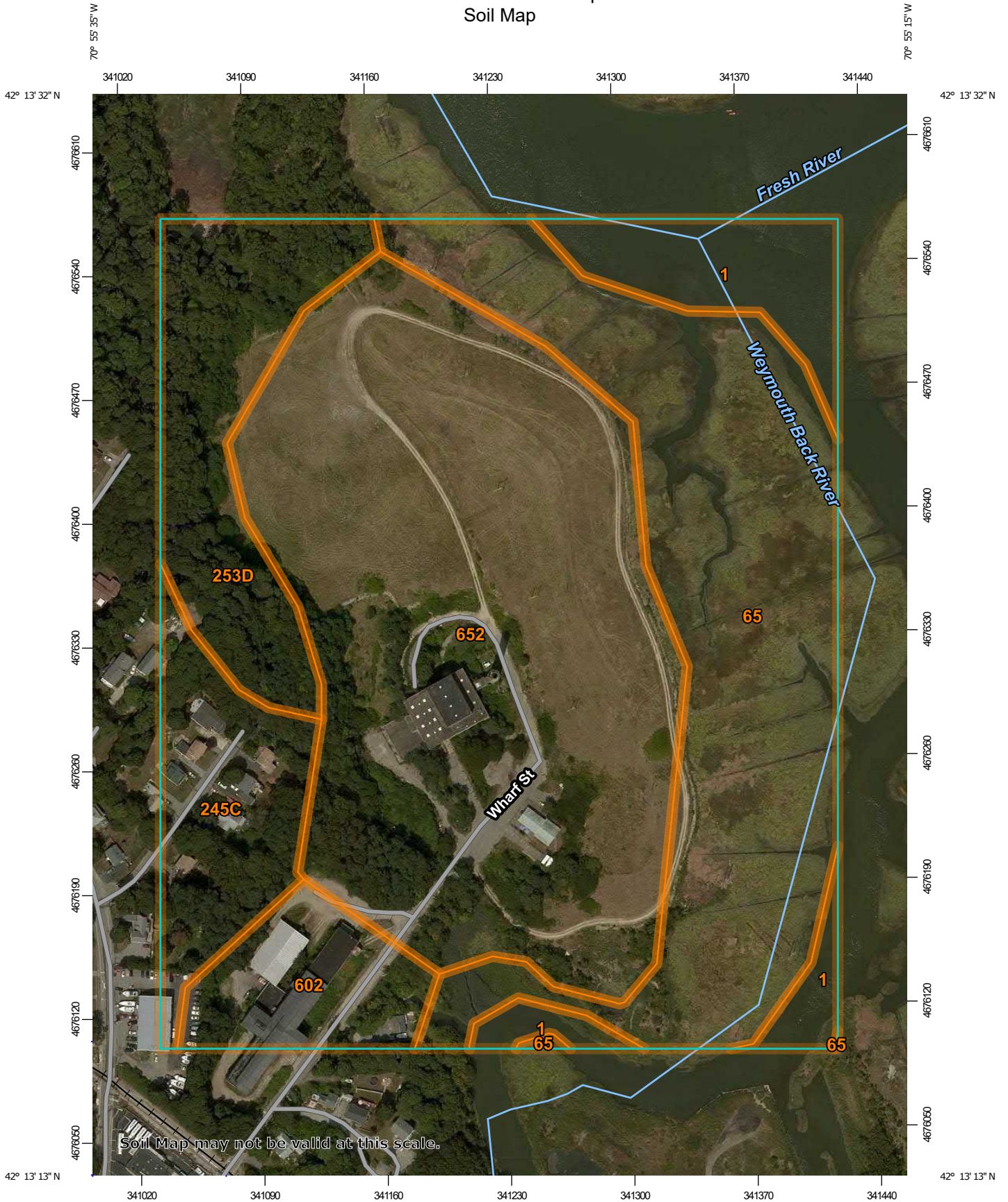
Custom Soil Resource Report

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

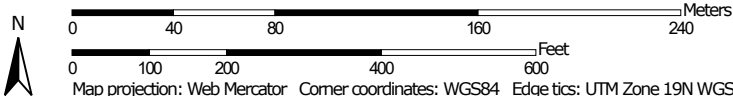
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.

Map Scale: 1:2,980 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)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

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: Norfolk and Suffolk Counties, Massachusetts
 Survey Area Data: Version 16, Jun 11, 2020

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

Date(s) aerial images were photographed: Aug 10, 2014—Aug 25, 2014

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	3.1	6.9%
65	Ipswich mucky peat, 0 to 2 percent slopes, very frequently flooded	12.5	27.9%
245C	Hinckley loamy sand, 8 to 15 percent slopes	3.3	7.4%
253D	Hinckley loamy sand, 15 to 35 percent slopes	4.5	10.1%
602	Urban land, 0 to 15 percent slopes	2.4	5.3%
652	Udorthents, refuse substratum	18.9	42.3%
Totals for Area of Interest		44.8	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

Custom Soil Resource Report

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

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.

Norfolk and Suffolk Counties, Massachusetts

1—Water

Map Unit Setting

National map unit symbol: vkyp
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 120 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.

65—Ipswich mucky peat, 0 to 2 percent slopes, very frequently flooded

Map Unit Setting

National map unit symbol: 2tyqj
Elevation: 0 to 10 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Ipswich

Setting

Landform: Tidal marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Partially- decomposed herbaceous organic material

Typical profile

Oe - 0 to 42 inches: mucky peat
Oa - 42 to 59 inches: muck

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.14 to 99.90 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Very frequent

Custom Soil Resource Report

Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to strongly saline (0.7 to 111.6 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Very high (about 26.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Hydrologic Soil Group: A/D
Ecological site: R144AY002CT - Tidal Salt High Marsh mesic very frequently flooded, R144AY001CT - Tidal Salt Low Marsh mesic very frequently flooded
Hydric soil rating: Yes

Minor Components

Westbrook

Percent of map unit: 5 percent
Landform: Tidal marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R144AY002CT - Tidal Salt High Marsh mesic very frequently flooded, R144AY001CT - Tidal Salt Low Marsh mesic very frequently flooded
Hydric soil rating: Yes

Pawcatuck

Percent of map unit: 5 percent
Landform: Tidal marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R144AY002CT - Tidal Salt High Marsh mesic very frequently flooded, R144AY001CT - Tidal Salt Low Marsh mesic very frequently flooded
Hydric soil rating: Yes

245C—Hinckley loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svm9
Elevation: 0 to 1,480 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Hinckley

Setting

Landform: Outwash deltas, kame terraces, outwash plains, kames, eskers, moraines, outwash terraces
Landform position (two-dimensional): Shoulder, toeslope, footslope, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, riser
Down-slope shape: Convex, concave, linear
Across-slope shape: Concave, linear, convex
Parent material: Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 8 inches: loamy sand
Bw1 - 8 to 11 inches: gravelly loamy sand
Bw2 - 11 to 16 inches: gravelly loamy sand
BC - 16 to 19 inches: very gravelly loamy sand
C - 19 to 65 inches: very gravelly sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Merrimac

Percent of map unit: 5 percent
Landform: Eskers, moraines, outwash terraces, outwash plains, kames
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest, riser
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Windsor

Percent of map unit: 5 percent

Custom Soil Resource Report

Landform: Moraines, kame terraces, outwash plains, outwash terraces, outwash deltas, kames, eskers

Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope

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

Down-slope shape: Convex, linear, concave

Across-slope shape: Linear, convex, concave

Hydric soil rating: No

Sudbury

Percent of map unit: 5 percent

Landform: Outwash terraces, kame terraces, outwash plains, moraines, outwash deltas

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Base slope, tread

Down-slope shape: Concave, linear

Across-slope shape: Linear, concave

Hydric soil rating: No

253D—Hinckley loamy sand, 15 to 35 percent slopes

Map Unit Setting

National map unit symbol: 2svmd

Elevation: 0 to 860 feet

Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Hinckley and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hinckley

Setting

Landform: Outwash plains, kames, eskers, moraines, outwash terraces, outwash deltas, kame terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Crest, nose slope, side slope, head slope, riser

Down-slope shape: Concave, convex, linear

Across-slope shape: Linear, convex, concave

Parent material: Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 8 inches: loamy sand

Custom Soil Resource Report

Bw1 - 8 to 11 inches: gravelly loamy sand
Bw2 - 11 to 16 inches: gravelly loamy sand
BC - 16 to 19 inches: very gravelly loamy sand
C - 19 to 65 inches: very gravelly sand

Properties and qualities

Slope: 15 to 35 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Windsor

Percent of map unit: 10 percent
Landform: Moraines, kame terraces, outwash plains, outwash terraces, outwash deltas, kames, eskers
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, crest, side slope, head slope, riser
Down-slope shape: Convex, linear, concave
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Merrimac

Percent of map unit: 3 percent
Landform: Kames, eskers, moraines, outwash terraces, outwash plains, kame terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, crest, head slope, nose slope, riser
Down-slope shape: Convex, concave, linear
Across-slope shape: Concave, convex, linear
Hydric soil rating: No

Sudbury

Percent of map unit: 2 percent
Landform: Moraines, outwash terraces, kame terraces, outwash plains, outwash deltas
Landform position (two-dimensional): Backslope, footslope, toeslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Linear, concave
Across-slope shape: Concave, linear

Hydric soil rating: No

602—Urban land, 0 to 15 percent slopes

Map Unit Setting

National map unit symbol: vkyj
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 120 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 99 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Parent material: Excavated and filled land

Minor Components

Rock outcrops

Percent of map unit: 1 percent
Hydric soil rating: Unranked

652—Udorthents, refuse substratum

Map Unit Setting

National map unit symbol: vkyg
Elevation: 0 to 3,000 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

Udorthents and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Landform position (two-dimensional): Shoulder, summit, backslope

Landform position (three-dimensional): Riser, tread

Down-slope shape: Linear, convex

Across-slope shape: Convex, linear

Parent material: Excavated and filled loamy land over made land, refuse

Typical profile

H1 - 0 to 6 inches: variable

H2 - 6 to 60 inches: variable

Properties and qualities

Slope: 0 to 25 percent

Depth to restrictive feature: More than 80 inches

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Hydric soil rating: Unranked

Minor Components

Udorthents

Percent of map unit: 5 percent

Hydric soil rating: Unranked

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APPENDIX B – Stormwater Management Report and Checklist



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.

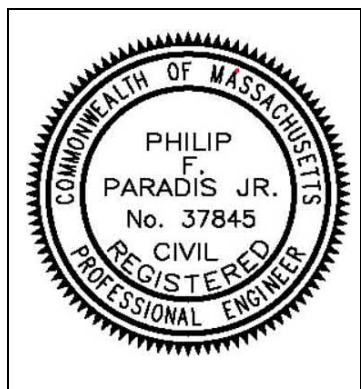
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the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



Philip F. Paradis Jr.

5/5/21

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.

STORMWATER MANAGEMENT CHECKLIST NARRATIVE INCINERATOR DEMOLITION PROJECT, WEYMOUTH, MA

May 2021

The Project includes the abatement and demolition of an incinerator located at 87 Wharf Street in Weymouth, Massachusetts (the Site). Work associated with the Project will include installation of erosion controls and temporary fencing, demolition and disposal of the building and all appurtenances, abandonment of drainage structures, and removal of bituminous concrete. The Project will result in a reduction of 34,609 square feet in impervious area that will be subsequently stabilized with loam and seed. No new stormwater infrastructure is proposed by the Project. Therefore, a formal Stormwater Management Report with supporting calculations has not been produced. However, the following is a narrative outlining the Stormwater Management Standards and how they relate to the Project:

LID Measures:

The Project includes significant reduction in impervious area and subsequent stabilization with loam and seed.

Standard 1: No New Untreated Discharges

No new discharges to wetlands are created as part of this Project. *This Standard is fully met.*

Standard 2: Peak Rate Attenuation

The Project will decrease impervious surfaces by converting the footprint of the building and bituminous areas to grass. This will not increase the peak rate of stormwater runoff leaving the Site; rather, it will effectively slow runoff by promoting increased groundwater recharge. *This Standard is fully met.*

Standard 3: Recharge

The Project will result in a 34,609-square foot reduction in impervious area which will be converted to grass. Although no stormwater BMPs with a measurable water quality treatment volume are proposed, a significant volume of stormwater will now recharge the groundwater table rather than flowing offsite via impervious surfaces. Since all impervious surface is removed, *this Standard is not applicable.*

Standard 4: Water Quality

Paved surfaces at the Site are presently sources of potential contamination such as sediment and debris. The Project does not propose any stormwater BMPs to meet a targeted total suspended solids (TSS) removal rate; rather, the significant reduction in

STORMWATER MANAGEMENT CHECKLIST NARRATIVE INCINERATOR DEMOLITION PROJECT, WEYMOUTH, MA

impervious area will promote recharge and reduce runoff, thereby improving water quality of the downgradient Salt Marsh and Back River. Since all impervious surface is removed, this Standard is not applicable.

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

The Project does not propose Land Uses with Higher Potential Pollutant Loads. This Standard is not applicable.

Standard 6: Critical Areas

An Outstanding Resource Water associated with the Back River exists to the east of the Site; however, no work or discharges will take place within this area. This Standard is not applicable.

Standard 7: Redevelopment

The Project is classified as a Redevelopment Project, as it will occur within previously developed/degraded areas. The Project will result in no increase in impervious surfaces.

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

The Project will not disturb more than an acre of land; therefore, a Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) pursuant to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) is not required. Erosion and sediment controls will be implemented for the Project and shall include 12-inch compost filter tubes, entrenched siltation fencing, and catch basin inlet protection. A Construction Period Pollution Prevention and Erosion and Sediment Control Plan is enclosed with this narrative. This Standard is fully met.

Standard 9: Long Term Operation and Maintenance Plan

Operation and maintenance of stormwater management systems will be the responsibility of the Weymouth Department of Public Works. Therefore, street sweeping, catch basin inspection and maintenance, and stormwater basin management are and will be in accordance with the municipal Operation and Maintenance (O&M) Plan. Specific, standalone O&M details are enclosed with this narrative. This Standard is fully met.

**STORMWATER MANAGEMENT CHECKLIST NARRATIVE
INCINERATOR DEMOLITION PROJECT, WEYMOUTH, MA**

Standard 10: Prohibition of Illicit Discharges

The Project includes removal of hazardous building materials and wastes as part of the demolition. There are currently no known or proposed illicit discharges within the Project limits. *This Standard is fully met.*

**INCINERATOR DEMOLITION PROJECT, WEYMOUTH, MA
CONSTRUCTION PERIOD POLLUTION PREVENTION AND
EROSION AND SEDIMENTATION CONTROL PLAN**

May 2021

Project Description:

The Project includes the abatement and demolition of an incinerator located at 87 Wharf Street in Weymouth, Massachusetts (the Site). Work associated with the Project will include installation of erosion controls and temporary fencing, demolition and disposal of the building and all appurtenances, abandonment of drainage structures, and removal of bituminous concrete. The Project will result in a reduction of 34,609 square feet in impervious area that will be subsequently stabilized with loam and seed.

Anticipated Construction Schedule:

- Install construction fence surrounding the work area.
- Install erosion controls and establish construction entrance.
- Perform hazardous materials abatement of the incinerator.
- Demolish and dispose of the incinerator and all appurtenances, including surrounding bituminous surfaces and fill piles.
- Backfill foundation and perform regrading.
- Stabilize area with loam and seed.
- Cleanup the Site and remove erosion controls following stabilization.

Potential Erosion and Sedimentation:

The Project involves work within and adjacent to the local Buffer Zone to Land Subject to Coastal Storm Flowage. The Back River Area of Critical Environmental Concern (ACEC) is also located in the vicinity of the Site. In addition, a Salt Marsh and perennial stream are located downgradient of onsite stormwater infrastructure. Site preparation, scheduling and construction practices need to be carefully planned to prevent construction debris and erosion caused by stormwater runoff from causing degradation of Resource Areas. Additionally, the following guidelines shall be followed:

- Minimize land disturbance area and soil exposure to stormwater and wind erosion.
- Minimize time that any area is disturbed.
- Avoid routing stormwater runoff or dewatering flows through disturbed areas.
- Inspect and maintain erosion controls until all soils are stabilized.
- Implement additional erosion controls around all stockpiles.
- Protect onsite catch basins to prevent migration of sediment and debris.

INCINERATOR DEMOLITION PROJECT, WEYMOUTH, MA CONSTRUCTION PERIOD POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL PLAN

- Maintain good housekeeping practices.
- Stabilize disturbed soils as soon as possible to limit exposure.
- Enter and exit the Site through a single point stabilized with a sediment tracking pad.

Erosion and Sedimentation Plan:

This Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan has been prepared in accordance with the Department of Environmental Protection's Massachusetts Erosion and Sedimentation Guidelines for Urban and Suburban Areas for the demolition of the incinerator at 87 Wharf Street in Weymouth, Massachusetts.

Pre-Construction and Construction-Period Activities

1. Install all erosion control measures in accordance with the construction documents prior to commencing demolition or any land disturbance activity. These include 12-inch diameter compost filter tubes, entrenched siltation fencing, and catch basin inlet protection.
2. Complete demolition of the incinerator and surrounding bituminous concrete.
3. Inspect and maintain erosion controls until all soils are stabilized.
4. Install loam and seed for all disturbed areas.

Inspection and Maintenance of Erosion Controls During Construction

Inspect erosion controls weekly and after every storm event.

1. Erosion Control Measures: Check for sediment accumulation and properly remove/dispose of sediment when it reaches half the height of the compost filter tubes. Inspect siltation fencing for tears and damage. Repair and replace erosion control measures as needed.
2. Inspect catch basin inlet protection measures and properly remove/dispose of sediment. Replace inlet protection measures upon any signs of damage. Monitor downgradient discharge points for sediment migration.
3. Manage demolition debris in such a way that they will not be transported by stormwater or wind. Maintain additional erosion controls around all stockpiles.
4. Inspect the stabilized construction entrance daily for excess sediment and reconstruct if necessary, to prevent the tracking of sediment out of the Site.
5. Inspect Wharf Street daily for soil/sediment tracking and sweep if necessary.

**INCINERATOR DEMOLITION PROJECT, WEYMOUTH, MA
CONSTRUCTION PERIOD POLLUTION PREVENTION AND
EROSION AND SEDIMENTATION CONTROL PLAN**

Good Housekeeping Practices

1. Stockpiles of materials are to be located outside of the 100-foot Buffer Zone to any Resource Area. Provide sufficient erosion controls to prevent migration of sediments.
2. Minimize hazardous materials stored on site. All materials stored on site shall be secured with perimeter erosion controls and covered with tarps.
3. Refuel construction equipment outside of the 100-foot Buffer Zone to any Resource Area.
4. Any spills of hazardous materials shall be reported, contained, and removed in accordance with local, state and federal regulations.

Plans

See Project Plans for locations of all proposed erosion and sedimentation controls.

LONG TERM OPERATION & MAINTENANCE PLAN
STORMWATER MANAGEMENT SYSTEMS
87 WHARF STREET, WEYMOUTH, MA

May 2021

This stormwater management system (SWMS) Operations and Maintenance Plan has been prepared in accordance with the Massachusetts Department of Environmental Protection's Stormwater Management Standards.

General Information:

Project Name: Incinerator Demolition
Project Type: Demolition/Restoration
Address: 87 Wharf Street, Weymouth, MA 02189

SWMS Owner: Town of Weymouth
75 Middle Street, Weymouth, MA 02189

Responsible Party: Town of Weymouth DPW
120 Winter Street, Weymouth, MA 02188

Contact: John MacLeod

It shall be the responsibility of the Owner to provide a revised plan to the Conservation Commission indicating any change of ownership or responsible party.

BMP Inspection and Maintenance Procedures:

Effectiveness of Best Management Practices (BMPs) are maximized when properly maintained. The following inspections schedule and maintenance required of BMPs for this project (see attached plan) shall be as outlined and documented below.

1. **Pavement Sweeping:** Paved areas shall be swept annually, on or prior to April 1, to remove excess sediments. This will result in a decreased sediment load that the drainage system will have to remove from the runoff. Use of salt for de-icing purposes on the roadway during the winter months should be kept to a minimum to reduce the need for removal and treatment.
2. **Catch Basin Cleaning:** Excess sediment shall be removed from catch basins once sediment reaches a height one-third the depth from the sump to the invert of the lowest elevation pipe. Sediment shall be disposed of at an approved facility.
3. **Stormwater Basin Maintenance:** Stormwater basins shall be mowed on a yearly basis during dry conditions to prevent growth of woody vegetation. The outlet control structure must be periodically inspected to ensure that no blockages are present.
4. **Outfall Maintenance:** Any outfalls on Town property should be inspected biannually for signs or erosion, scour, or pipe failure. Consult the Conservation Commission if repairs are required within Areas Subject to Jurisdiction.

LONG TERM OPERATION & MAINTENANCE PLAN
STORMWATER MANAGEMENT SYSTEMS
87 WHARF STREET, WEYMOUTH, MA

5. **Grass Areas:** Grass areas shall be maintained in accordance with the DPW practices. Grass clippings shall be prevented from entering wetland resource areas.
6. **Maintenance Responsibilities:** All post construction maintenance activities should be documented, on the following form, kept on file and made available to the Conservation Commission upon request. All post construction maintenance activities shall survive the Order of Conditions and shall run with the title of the property.

Public Safety and Features:

1. Provide police detail for extended occupation of roadway if traffic dictates.
2. All excavations and entry into closed structures will be completed in accordance with OSHA requirements.

Approximate Maintenance Budget

Inspection and maintenance for this site is estimated as follows.

1. Inspections	Included in municipal budget
2. Street Sweeping	Included in municipal budget
3. Stormwater Basin	Included in municipal budget
4. Outfalls	Included in municipal budget
5. Lawn Areas	Included in municipal budget
Annual Total	Included in municipal budget

Illicit Discharges

Illicit discharges are not to be permitted. There were no illicit discharges reported during the design phase of this project. No illicit discharges are proposed in the design. If any illicit discharges are proposed they will be removed.

**LONG TERM OPERATION & MAINTENANCE PLAN
STORMWATER MANAGEMENT SYSTEMS
87 WHARF STREET, WEYMOUTH, MA**

BMP Inspection and Maintenance Documentation Form

Inspection No.: _____ Date: _____ Weather: _____

Date & Amount of Last Precipitation Event: _____

Inspector Name. _____ Inspection Signature. _____

BMP	Condition/Stability	Comment & Recommendations	Date Corrected
Street Sweeping			
Stone Parking Lot			
Grass Swale			
Lawns/ Fields			
Other			
Additional Comments			

ILLICIT DISCHARGE STATEMENT

Wharf Street Incinerator Demolition

87 Wharf Street, Weymouth, MA

Standard 10 of the Massachusetts Stormwater Regulations prohibits illicit discharges to stormwater management systems. The stormwater management system is the system for conveying, treating, and infiltrating stormwater on site including stormwater best management practices and any pipes intended to transport stormwater to the ground water, a surface water, or municipal separate storm sewer system.

Illicit discharges to the stormwater management system are discharges that are not entirely comprised of stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated ground water, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.

I, Craig Ellis (print name), certify that I have conducted a proper site investigation and verify that to the best of my knowledge there are no known illicit discharges within the project site. If during the project construction, illicit discharges are found, they will be disconnected.

Craig Ellis

Digitally signed by Craig Ellis
DN: cn=Craig Ellis, c=US,
o=BETA Group,
email=cellis@beta-inc.com
Date: 2021.05.05 14:34:00 -04'00'

05/05/21

Signature

Date

APPENDIX C – Project Plans

TOWN OF WEYMOUTH, MASSACHUSETTS
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

WEYMOUTH INCINERATOR BUILDING HAZARDOUS MATERIALS ABATEMENT AND DEMOLITION

MAY 2021



MAYOR

ROBERT L. HEDLUND

DIRECTOR OF ASSET MANAGEMENT

JOHN MACLEOD

DEPARTMENT OF PLANNING AND
COMMUNITY DEVELOPMENT

ROBERT LUONGO, DIRECTOR

ERIC SCHNEIDER, PRINCIPAL PLANNER

KATE MARSHALL, COMMUNITY DEVELOPMENT PLANNER

**Project
Location**



LOCATION MAP

1" = 50'

PLAN INDEX

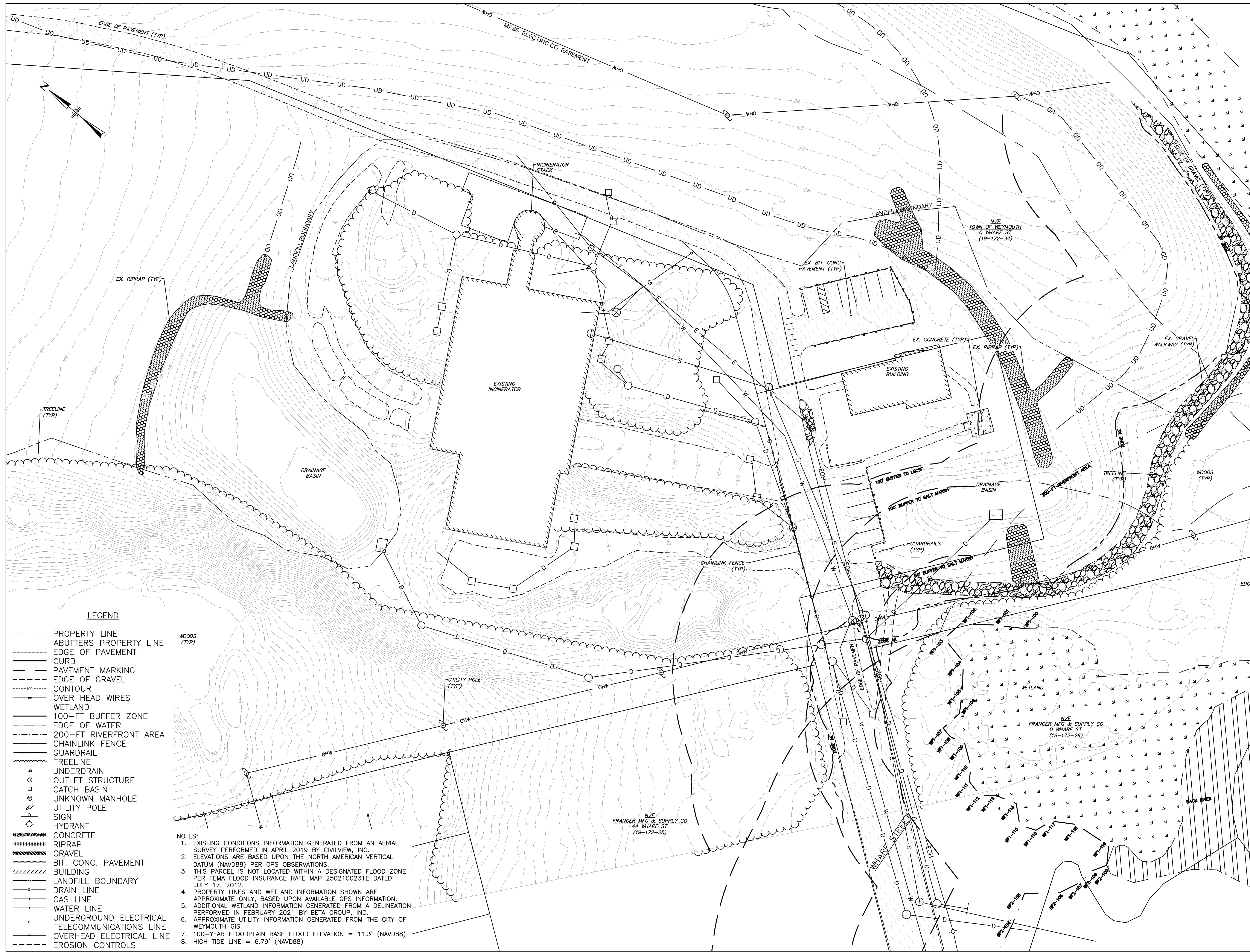
<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	EXISTING CONDITIONS
3	WORK PLAN
4	RESTORATION PLAN
5	LOWER LEVEL PLAN
6	DUMPING AND STOKING, MEZZANINE FLOOR PLAN
7	ROOF PLAN
8	DETAILS

PREPARED BY:



www.BETA-Inc.com

ISSUE DATE: MAY 2021



Wharf Street Incinerator

Weymouth, Massachusetts

EXISTING CONDITIONS

- LEGEND**
- PROPERTY LINE
 - ABUTTERS PROPERTY LINE
 - - - - - EDGE OF PAVEMENT
 - ==== CURB
 - - - - - PAVEMENT MARKING
 - - - - - EDGE OF GRAVEL
 - CONTOUR
 - 100--- OVER HEAD WIRES
 - WETLAND
 - 100-FT BUFFER ZONE
 - EDGE OF WATER
 - - - - - 200-FT RIVERFRONT AREA
 - CHAINLINK FENCE
 - GUARDRAIL
 - TREELINE
 - u— UNDERDRAIN
 - o— OUTLET STRUCTURE
 - CATCH BASIN
 - UNKNOWN MANHOLE
 - UTILITY POLE
 - S— SIGN
 - HYDRANT
 - CONCRETE
 - RIPRAP
 - GRAVEL
 - BIT. CONC. PAVEMENT
 - BUILDING
 - LANDFILL BOUNDARY
 - DRAIN LINE
 - GAS LINE
 - WATER LINE
 - UNDERGROUND ELECTRICAL
 - TELECOMMUNICATIONS LINE
 - OVERHEAD ELECTRICAL LINE
 - EROSION CONTROLS

- NOTES:**
1. EXISTING CONDITIONS INFORMATION GENERATED FROM AN AERIAL SURVEY PERFORMED IN APRIL 2019 BY CIVILVIEW, INC.
 2. ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM (NAVD88) PER GPS OBSERVATIONS.
 3. THIS PARCEL IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE PER FEMA FLOOD INSURANCE RATE MAP 25021C0231E DATED JULY 17, 2012.
 4. PROPERTY LINES AND WETLAND INFORMATION SHOWN ARE APPROXIMATE ONLY, BASED UPON AVAILABLE GPS INFORMATION.
 5. ADDITIONAL WETLAND INFORMATION GENERATED FROM A DELINEATION PERFORMED IN FEBRUARY 2021 BY BETA GROUP, INC.
 6. APPROXIMATE UTILITY INFORMATION GENERATED FROM THE CITY OF WEYMOUTH GIS.
 7. 100-YEAR FLOODPLAIN BASE FLOOD ELEVATION = 11.3' (NAVD88)
 8. HIGH TIDE LINE = 6.79' (NAVD88)

NO.	REVISIONS	DATE

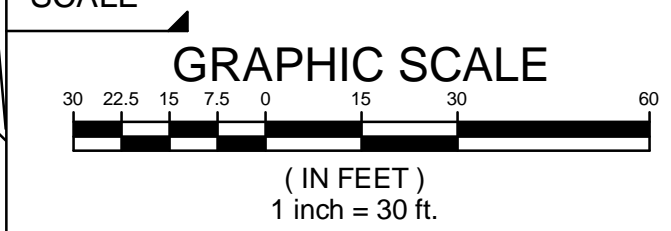
DRAWN BY:

DESIGNED BY:

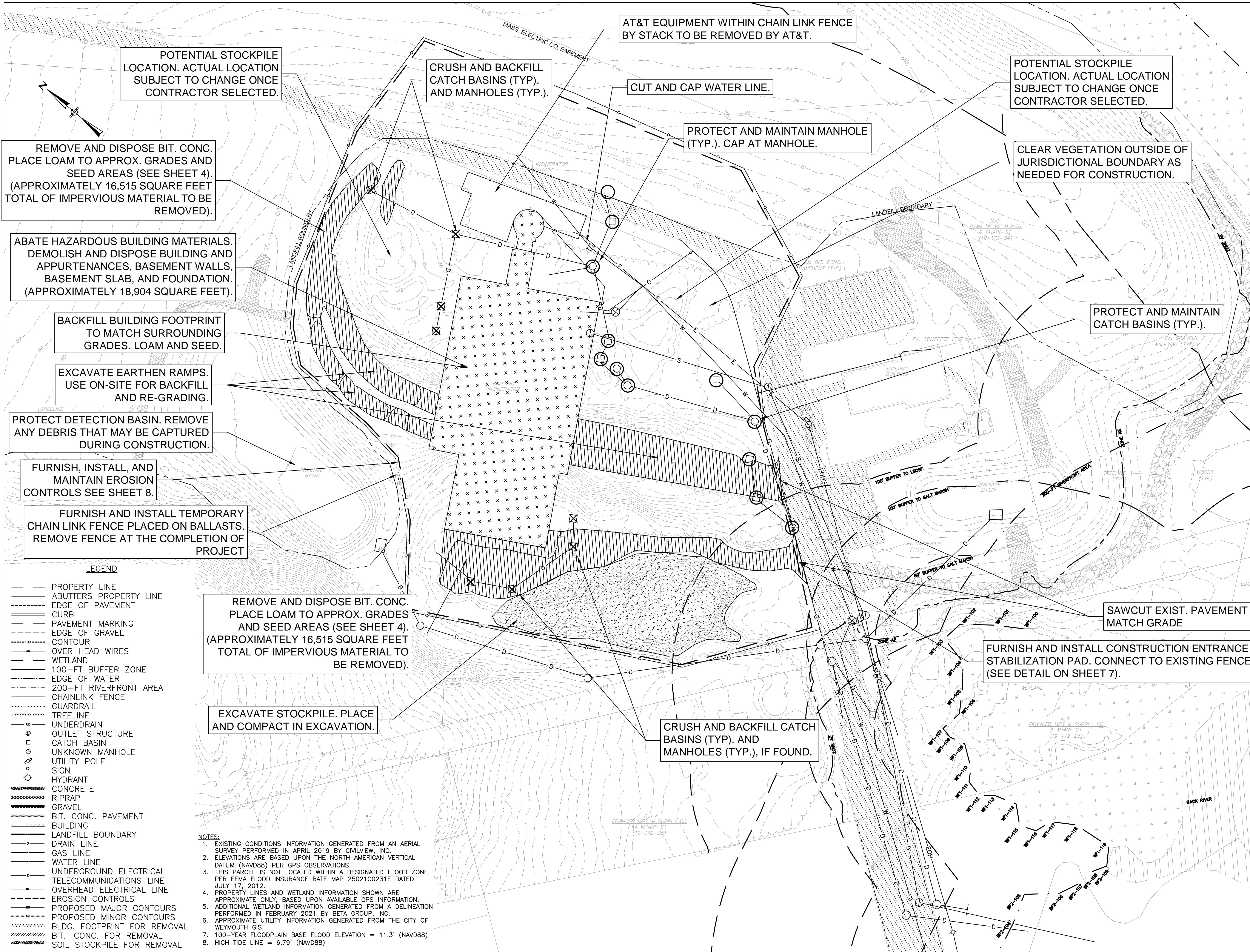
CHECKED BY:

ISSUE DATE: MAY 2021

BETA JOB NO.: 6023



FOR REVIEW



POTENTIAL STOCKPILE LOCATION. ACTUAL LOCATION SUBJECT TO CHANGE ONCE CONTRACTOR SELECTED.

CRUSH AND BACKFILL CATCH BASINS (TYP.) AND MANHOLES (TYP.).

AT&T EQUIPMENT WITHIN CHAIN LINK FENCE BY STACK TO BE REMOVED BY AT&T.

CUT AND CAP WATER LINE.

POTENTIAL STOCKPILE LOCATION. ACTUAL LOCATION SUBJECT TO CHANGE ONCE CONTRACTOR SELECTED.

PROTECT AND MAINTAIN MANHOLE (TYP.). CAP AT MANHOLE.

CLEAR VEGETATION OUTSIDE OF JURISDICTIONAL BOUNDARY AS NEEDED FOR CONSTRUCTION.

REMOVE AND DISPOSE BIT. CONC. PLACE LOAM TO APPROX. GRADES AND SEED AREAS (SEE SHEET 4). (APPROXIMATELY 16,515 SQUARE FEET TOTAL OF IMPERVIOUS MATERIAL TO BE REMOVED).

ABATE HAZARDOUS BUILDING MATERIALS. DEMOLISH AND DISPOSE BUILDING AND APPURTENANCES, BASEMENT WALLS, BASEMENT SLAB, AND FOUNDATION. (APPROXIMATELY 18,904 SQUARE FEET).

BACKFILL BUILDING FOOTPRINT TO MATCH SURROUNDING GRADES. LOAM AND SEED.

EXCAVATE EARTHEN RAMPS. USE ON-SITE FOR BACKFILL AND RE-GRADING.

PROTECT DETECTION BASIN. REMOVE ANY DEBRIS THAT MAY BE CAPTURED DURING CONSTRUCTION.

FURNISH, INSTALL, AND MAINTAIN EROSION CONTROLS SEE SHEET 8.

FURNISH AND INSTALL TEMPORARY CHAIN LINK FENCE PLACED ON BALLASTS. REMOVE FENCE AT THE COMPLETION OF PROJECT

PROTECT AND MAINTAIN CATCH BASINS (TYP.).

SAWCUT EXIST. PAVEMENT MATCH GRADE

REMOVE AND DISPOSE BIT. CONC. PLACE LOAM TO APPROX. GRADES AND SEED AREAS (SEE SHEET 4). (APPROXIMATELY 16,515 SQUARE FEET TOTAL OF IMPERVIOUS MATERIAL TO BE REMOVED).

EXCAVATE STOCKPILE. PLACE AND COMPACT IN EXCAVATION.

CRUSH AND BACKFILL CATCH BASINS (TYP.) AND MANHOLES (TYP.), IF FOUND.

FURNISH AND INSTALL CONSTRUCTION ENTRANCE STABILIZATION PAD. CONNECT TO EXISTING FENCE (SEE DETAIL ON SHEET 7).

LEGEND

- PROPERTY LINE
- ABUTTERS PROPERTY LINE
- EDGE OF PAVEMENT
- CURB
- PAVEMENT MARKING
- EDGE OF GRAVEL
- CONTOUR
- OVER HEAD WIRES
- WETLAND
- 100-FT BUFFER ZONE
- EDGE OF WATER
- 200-FT RIVERFRONT AREA
- CHAINLINK FENCE
- GUARDRAIL
- TREELINE
- UNDERDRAIN
- OUTLET STRUCTURE
- CATCH BASIN
- UNKNOWN MANHOLE
- UTILITY POLE
- SIGN
- HYDRANT
- CONCRETE
- RIPRAP
- GRAVEL
- BIT. CONC. PAVEMENT
- BUILDING
- LANDFILL BOUNDARY
- DRAIN LINE
- GAS LINE
- WATER LINE
- UNDERGROUND ELECTRICAL
- TELECOMMUNICATIONS LINE
- OVERHEAD ELECTRICAL LINE
- EROSION CONTROLS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- BLDG. FOOTPRINT FOR REMOVAL
- BIT. CONC. FOR REMOVAL
- SOIL STOCKPILE FOR REMOVAL

- NOTES:**
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 5. 100-YEAR FLOODPLAIN BASE FLOOD ELEVATION = 11.3' (NAVD88)
 6. HIGH TIDE LINE = 6.79' (NAVD88)

PREPARED BY

www.BETA-Inc.com

REGISTERED PROFESSIONAL

5/3/21

SUBCONSULTANT

PROJECT

Wharf Street Incinerator

Weymouth, Massachusetts

TITLE

WORK PLAN

NO.	REVISIONS	DATE

DRAWN BY:

DESIGNED BY:

CHECKED BY:

ISSUE DATE: MAY 2021

BETA JOB NO.: 6023

SCALE

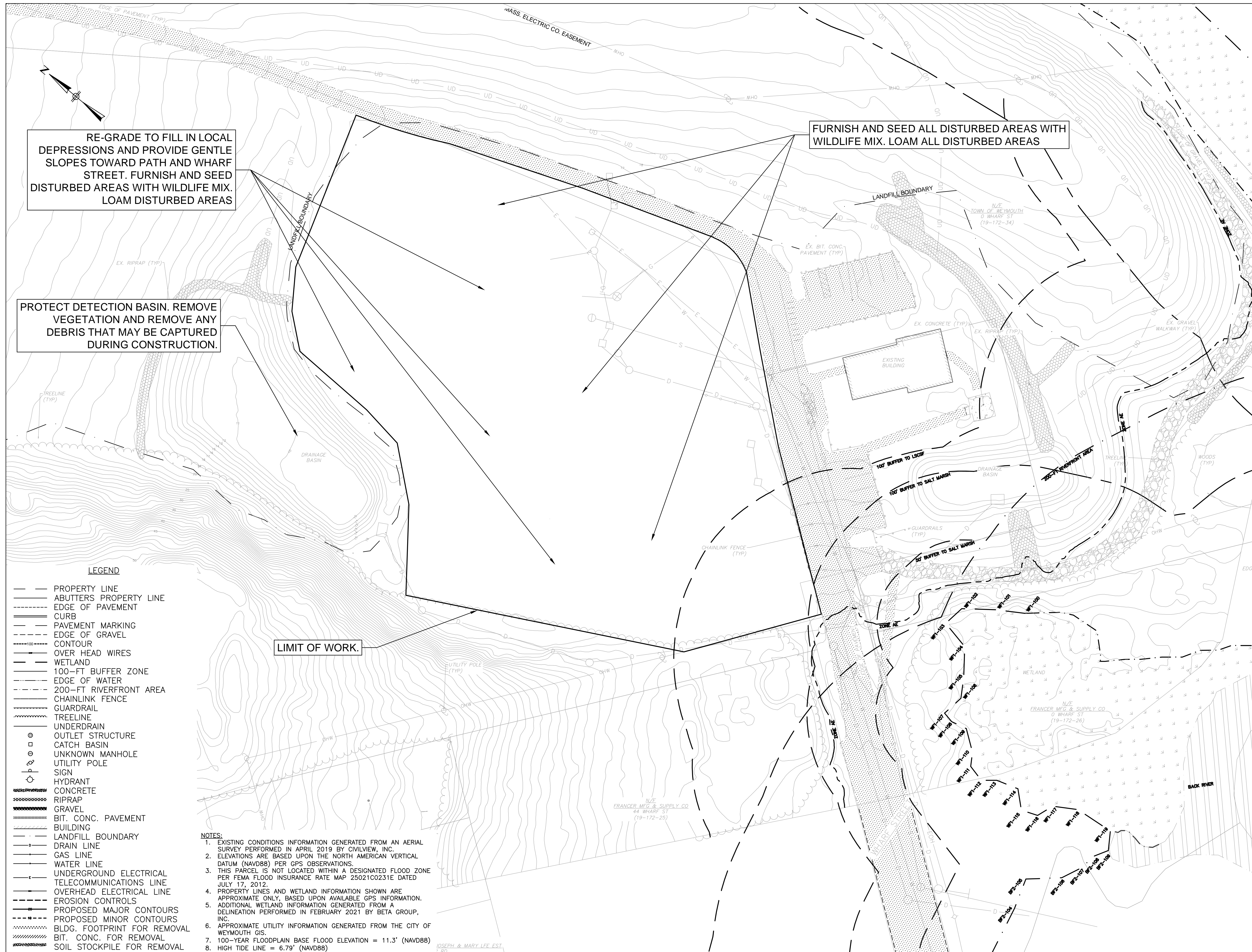
GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

FOR REVIEW

SHEET NO.

3



RE-GRADE TO FILL IN LOCAL DEPRESSIONS AND PROVIDE GENTLE SLOPES TOWARD PATH AND WHARF STREET. FURNISH AND SEED DISTURBED AREAS WITH WILDLIFE MIX. LOAM DISTURBED AREAS

FURNISH AND SEED ALL DISTURBED AREAS WITH WILDLIFE MIX. LOAM ALL DISTURBED AREAS


PROTECT DETECTION BASIN. REMOVE VEGETATION AND REMOVE ANY DEBRIS THAT MAY BE CAPTURED DURING CONSTRUCTION.

LIMIT OF WORK.

- LEGEND**
- PROPERTY LINE
 - ABUTTERS PROPERTY LINE
 - EDGE OF PAVEMENT
 - CURB
 - PAVEMENT MARKING
 - EDGE OF GRAVEL
 - CONTOUR
 - OVER HEAD WIRES
 - WETLAND
 - 100-FT BUFFER ZONE
 - EDGE OF WATER
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 - EROSION CONTROLS
 - PROPOSED MAJOR CONTOURS
 - PROPOSED MINOR CONTOURS
 - BLDG. FOOTPRINT FOR REMOVAL
 - BIT. CONC. FOR REMOVAL
 - SOIL STOCKPILE FOR REMOVAL

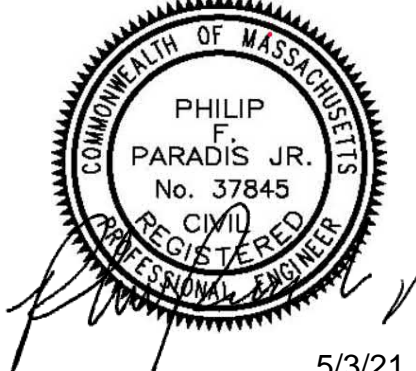
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PREPARED BY



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REGISTERED PROFESSIONAL



5/3/21

SUBCONSULTANT

PROJECT

Wharf Street Incinerator

Weymouth, Massachusetts

TITLE

RESTORATION PLAN

NO.	REVISIONS	DATE

DRAWN BY:

DESIGNED BY:


CHECKED BY:

ISSUE DATE: MAY 2021

BETA JOB NO.: 6023

SCALE

GRAPHIC SCALE



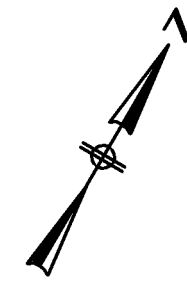
(IN FEET)
1 inch = 30 ft.

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

FOR REVIEW

SHEET NO.

4



LEGEND:
 X - PCB SUBSTRATE SAMPLE LOCATIONS
 D - DRUMS
 T - TANKS
 F - FLY ASH

PREPARED BY

 www.BETA-Inc.com

REGISTERED PROFESSIONAL

SUBCONSULTANT

PROJECT

Wharf Street Incinerator

Weymouth, Massachusetts

TITLE

LOWER LEVEL FLOOR PLAN

NO.	REVISIONS	DATE

DRAWN BY:
 DESIGNED BY:
 CHECKED BY:
 ISSUE DATE:
 BETA JOB NO.:
 SCALE



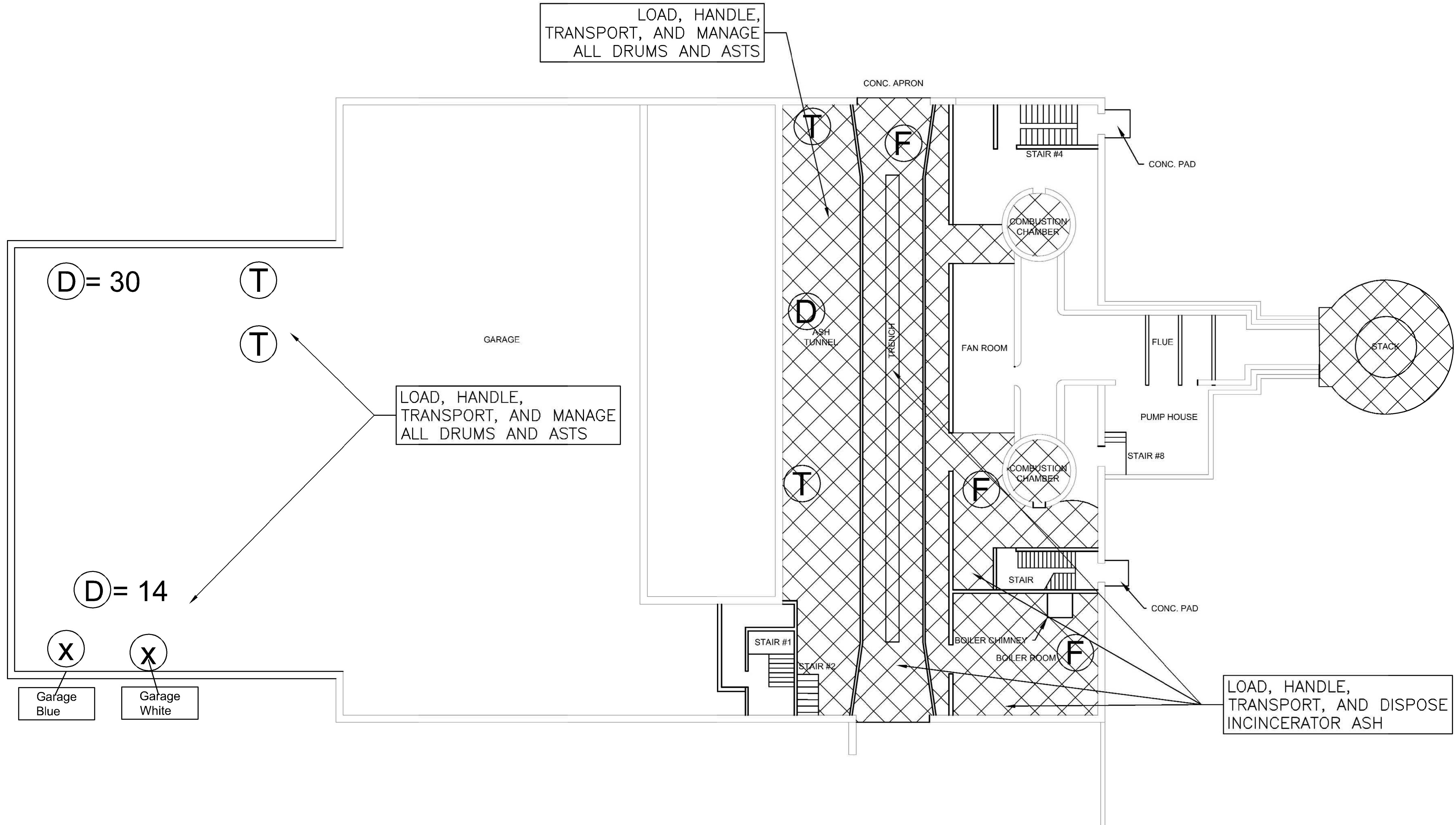
UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION
FOR REVIEW

SHEET NO.
5

LOAD, HANDLE,
 TRANSPORT, AND MANAGE
 ALL DRUMS AND ASTS

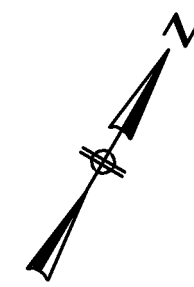
LOAD, HANDLE,
 TRANSPORT, AND MANAGE
 ALL DRUMS AND ASTS

LOAD, HANDLE,
 TRANSPORT, AND DISPOSE
 INCINERATOR ASH

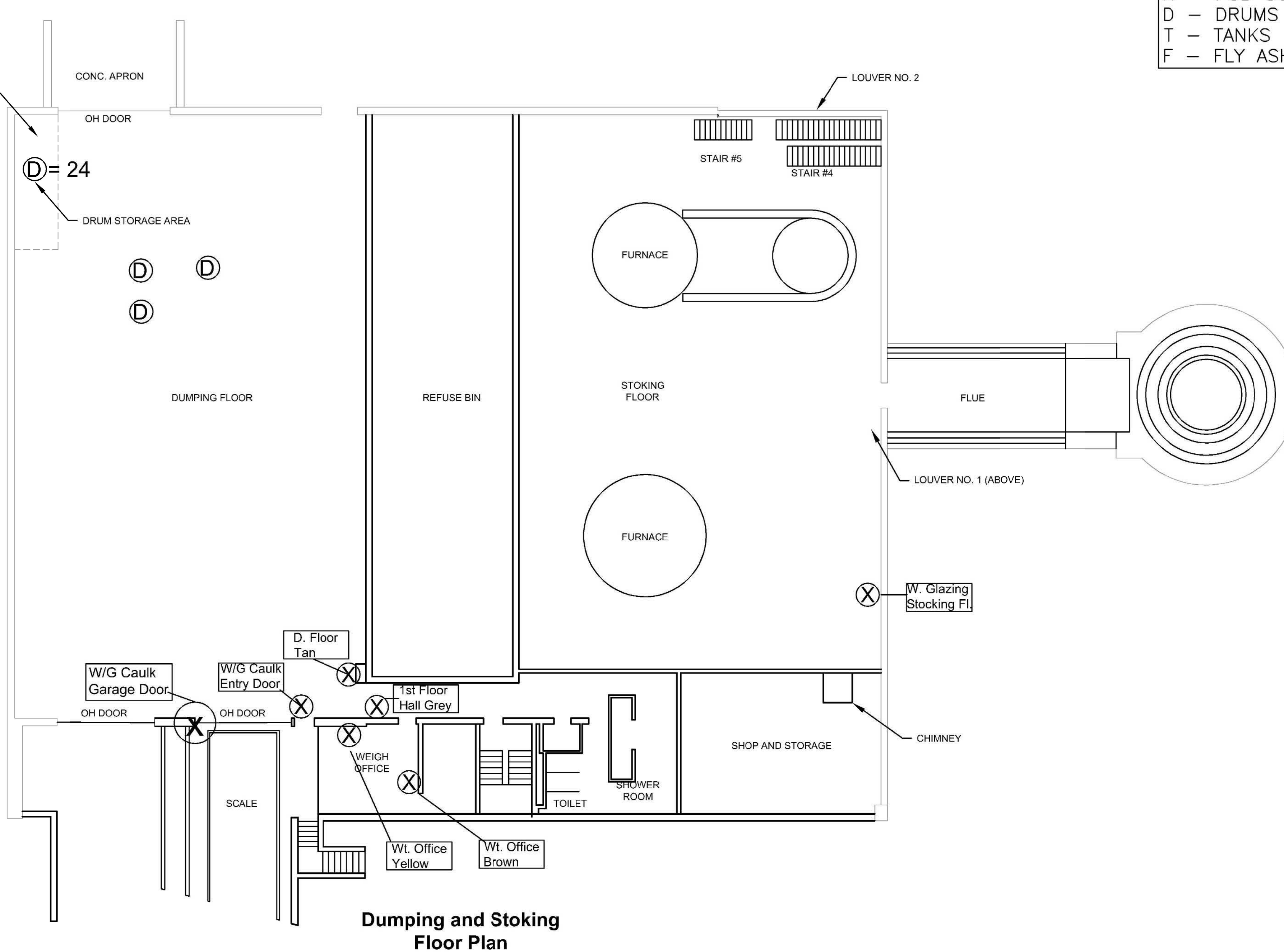


- NOTES:**
1. ORIGINAL PLAN CREATED BY METCALF & EDDY TITLED "ASH TUNNEL PLAN" AND DATED APRIL 1963. FLOOR LAYOUT IS APPROXIMATE ONLY AND MAY VARY FROM ACTUAL SITE CONDITIONS.
 2. DRUM AND MATERIAL QUANTITIES WERE OBSERVED AS OF JUNE 2018. CONTRACTOR IS RESPONSIBLE FOR VERIFYING SITE CONDITIONS, LAYOUTS, AND QUANTITIES DURING BIDDING.
 3. ASBESTOS CONTAINING BUILDING MATERIALS LOCATED ARE IDENTIFIED IN HAZARDOUS MATERIAL SURVEY INCLUDED AS ATTACHMENT A.
 4. SQUARE FOOTAGE OF LOWER LEVEL ESTIMATED TO BE ABOUT 18,000 SQUARE FEET.

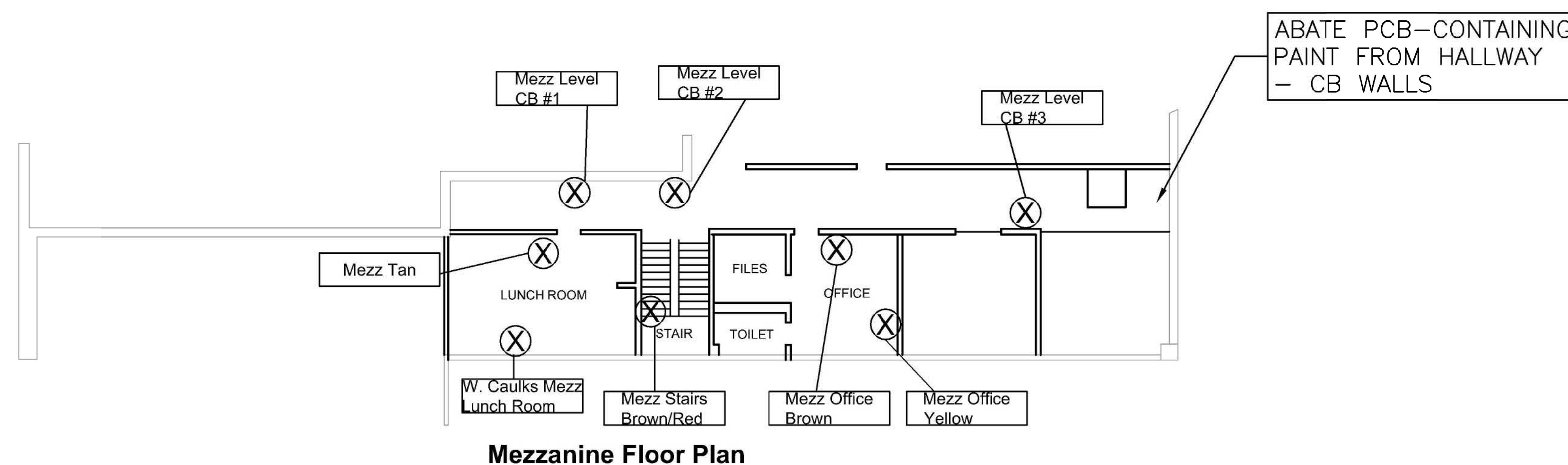
4/26/2021 5:13 PM O:\60605\6023 - WEYMOUTH - INCINERATOR DEMO\DRAWING FILES\PLANSET\2021-2-9 CONTRACT DRAWINGS.DWG (BETA STB BW/STB)



LOAD, HANDLE,
TRANSPORT, AND MANAGE
ALL DRUMS



**Dumping and Stoking
Floor Plan**



Mezzanine Floor Plan

LEGEND:
 X - PCB SUBSTRATE SAMPLE LOCATIONS
 D - DRUMS
 T - TANKS
 F - FLY ASH

PREPARED BY

 www.BETA-Inc.com

REGISTERED PROFESSIONAL

SUBCONSULTANT

PROJECT

**Wharf Street
Incinerator**


Weymouth, Massachusetts

TITLE

**DUMPING AND
STOKING,
MEZZANINE
FLOOR PLAN**

NO.	REVISIONS	DATE

DRAWN BY:
 DESIGNED BY:
 CHECKED BY:
 ISSUE DATE:
 BETA JOB NO.:

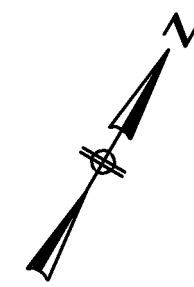
SCALE

 SCALE IN FEET: 1"=10'

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

FOR REVIEW

SHEET NO.

NOTES:
 1. ORIGINAL PLAN CREATED BY METCALF & EDDY TITLED "ASH TUNNEL PLAN" AND DATED APRIL 1963. FLOOR LAYOUT IS APPROXIMATE ONLY AND MAY VARY FROM ACTUAL SITE CONDITIONS.
 2. DRUM AND MATERIAL QUANTITIES WERE OBSERVED AS OF JUNE 2018. CONTRACTOR IS RESPONSIBLE FOR VERIFYING SITE CONDITIONS, LAYOUTS, AND QUANTITIES DURING BIDDING.
 3. ASBESTOS CONTAINING BUILDING MATERIALS LOCATED ARE IDENTIFIED IN HAZARDOUS MATERIAL SURVEY INCLUDED AS ATTACHMENT A.
 4. SQUARE FOOTAGE OF THE DUMPING AND STOKING FLOOR PLAN ESTIMATED TO BE ABOUT 13,000 SQUARE FEET.
 5. SQUARE FOOTAGE OF THE MEZZANINE FLOOR PLAN ESTIMATED TO BE APPROXIMATELY 1,700 SQUARE FEET.

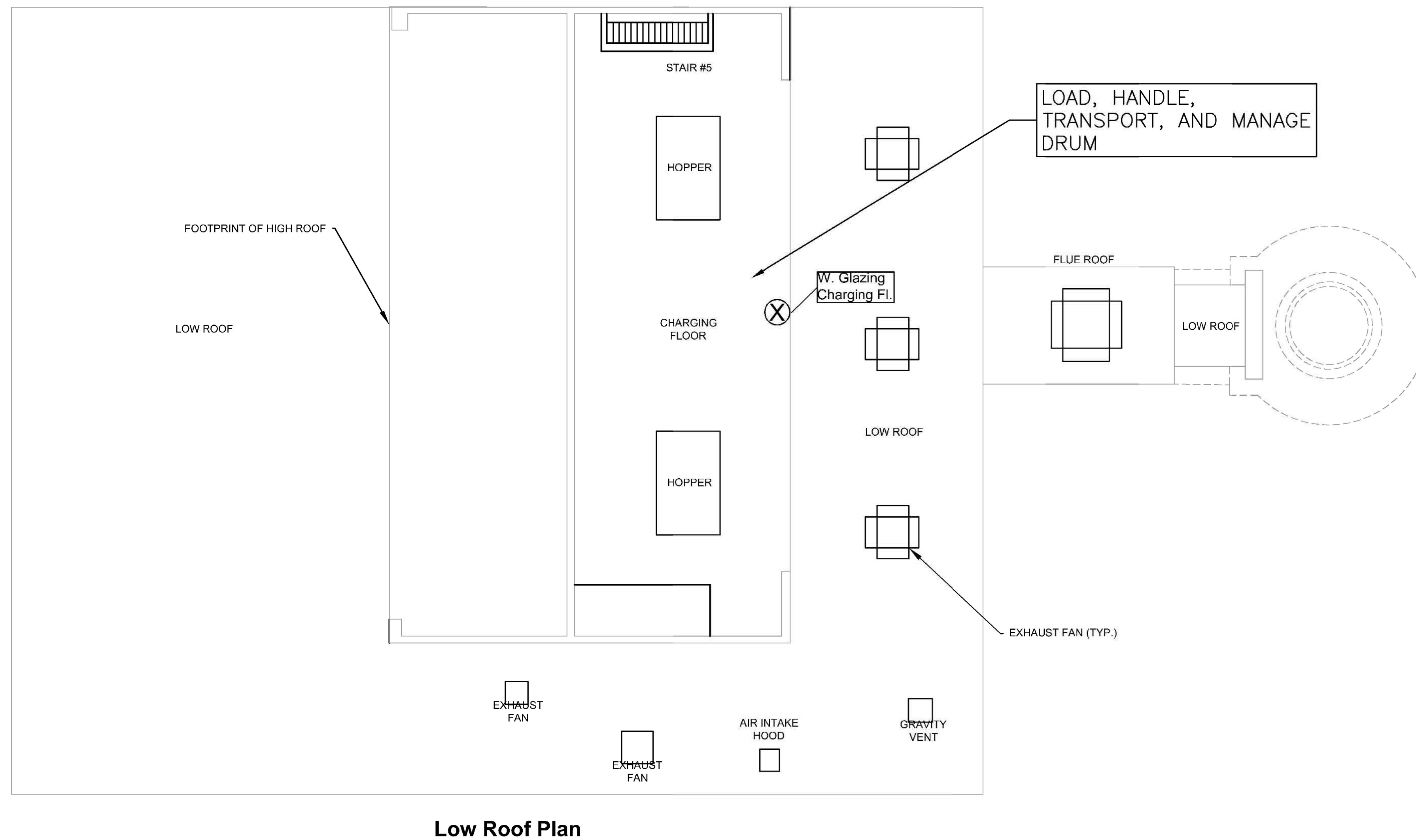


LEGEND:
 X - PCB SUBSTRATE SAMPLE LOCATIONS
 D - DRUMS
 T - TANKS
 F - FLY ASH

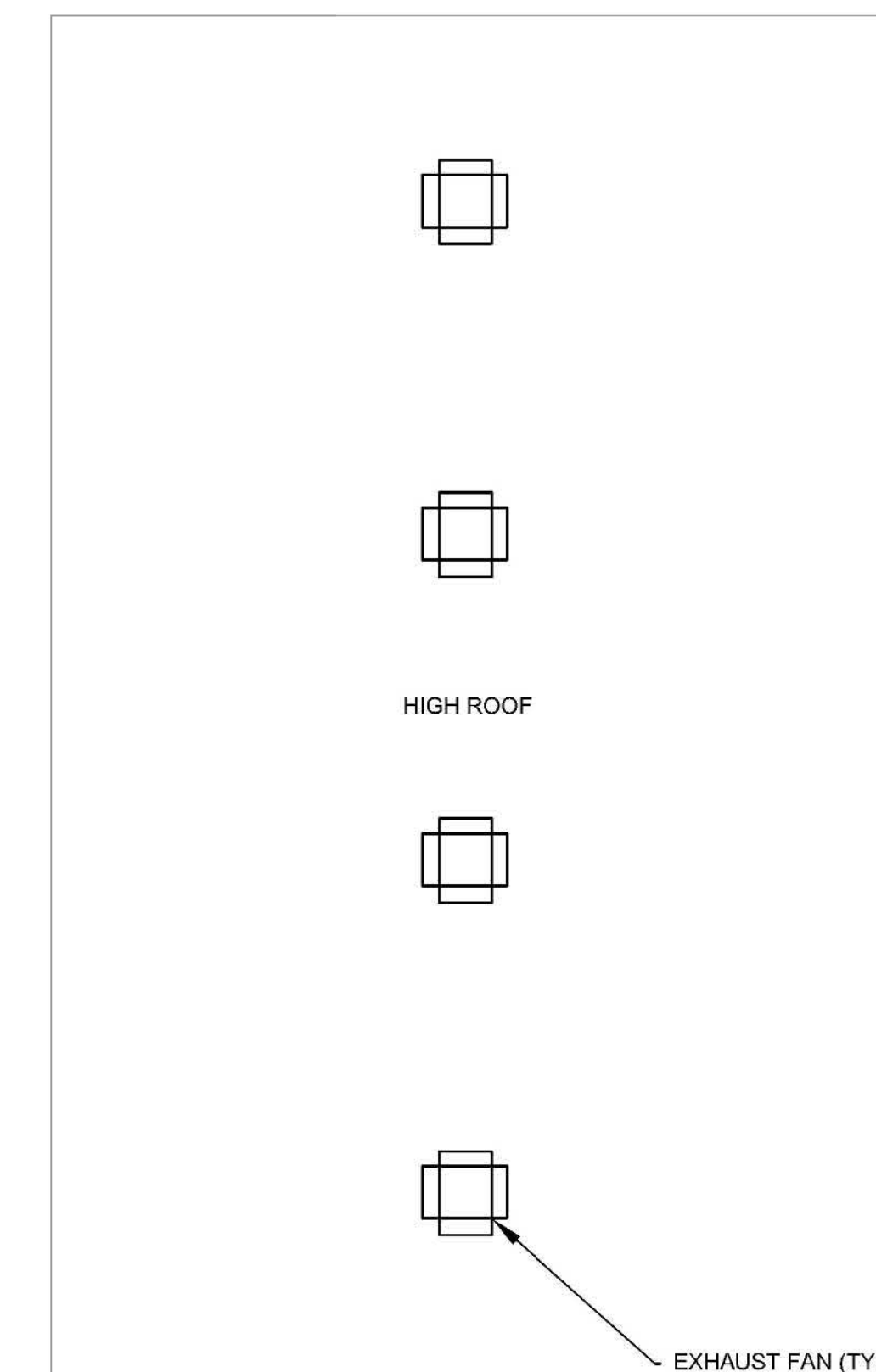
Wharf Street Incinerator

Weymouth, Massachusetts

ROOF FLOOR PLAN



Low Roof Plan



High Roof Plan

4/28/2021 5:14 PM O:\60605\6023 - WEYMOUTH - INCINERATOR DEMO\DRAWING FILES\PLANSET\2021-2-8 CONTRACT DRAWINGS.DWG (BETA STB BW STB)

NOTES:

1. ORIGINAL PLAN CREATED BY METCALF & EDDY TITLED "ASH TUNNEL PLAN" AND DATED APRIL 1963. FLOOR LAYOUT IS APPROXIMATE ONLY AND MAY VARY FROM ACTUAL SITE CONDITIONS.
2. DRUM AND MATERIAL QUANTITIES WERE OBSERVED AS OF JUNE 2018. CONTRACTOR IS RESPONSIBLE FOR VERIFYING SITE CONDITIONS, LAYOUTS, AND QUANTITIES DURING BIDDING.
3. ASBESTOS CONTAINING BUILDING MATERIALS LOCATED ARE IDENTIFIED IN HAZARDOUS MATERIAL SURVEY INCLUDED AS ATTACHMENT A.
4. SQUARE FOOTAGE OF LOW ROOF PLAN ESTIMATED TO BE ABOUT 4,500 SQUARE FEET.

NO.	REVISIONS	DATE

DRAWN BY:
 DESIGNED BY:
 CHECKED BY:
 ISSUE DATE:
 BETA JOB NO.:

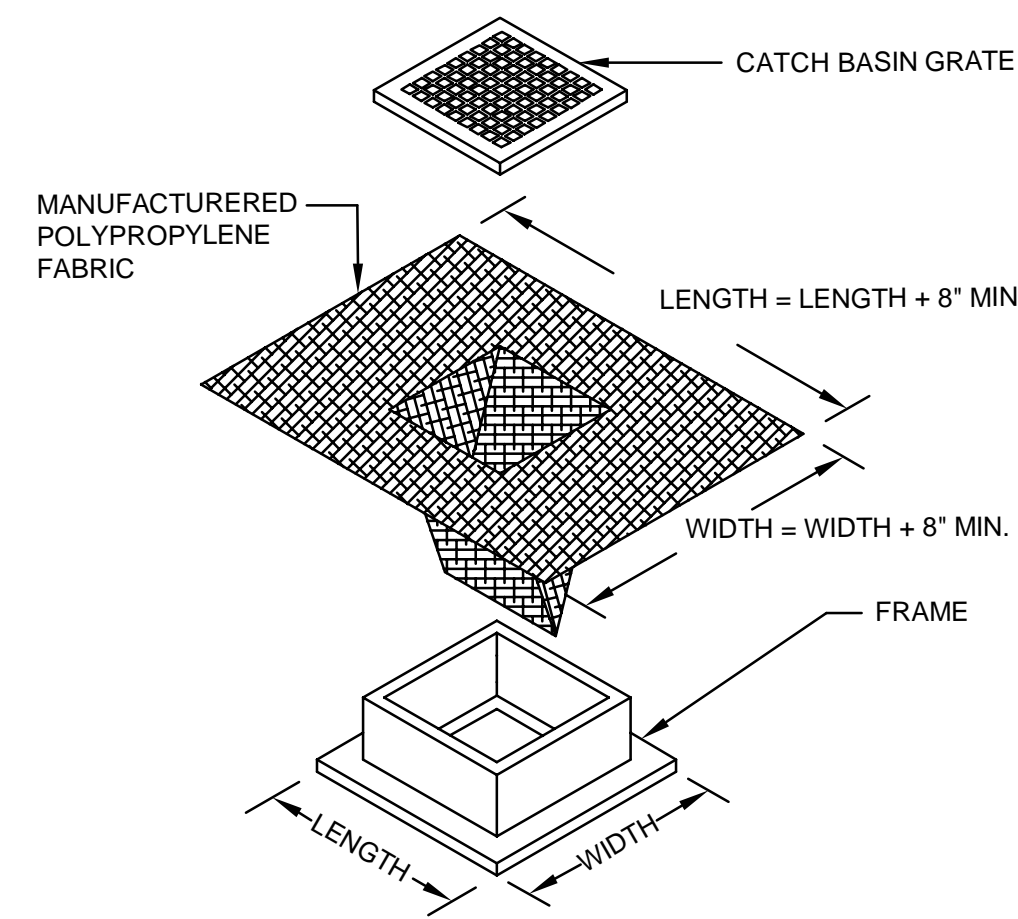
SCALE



UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

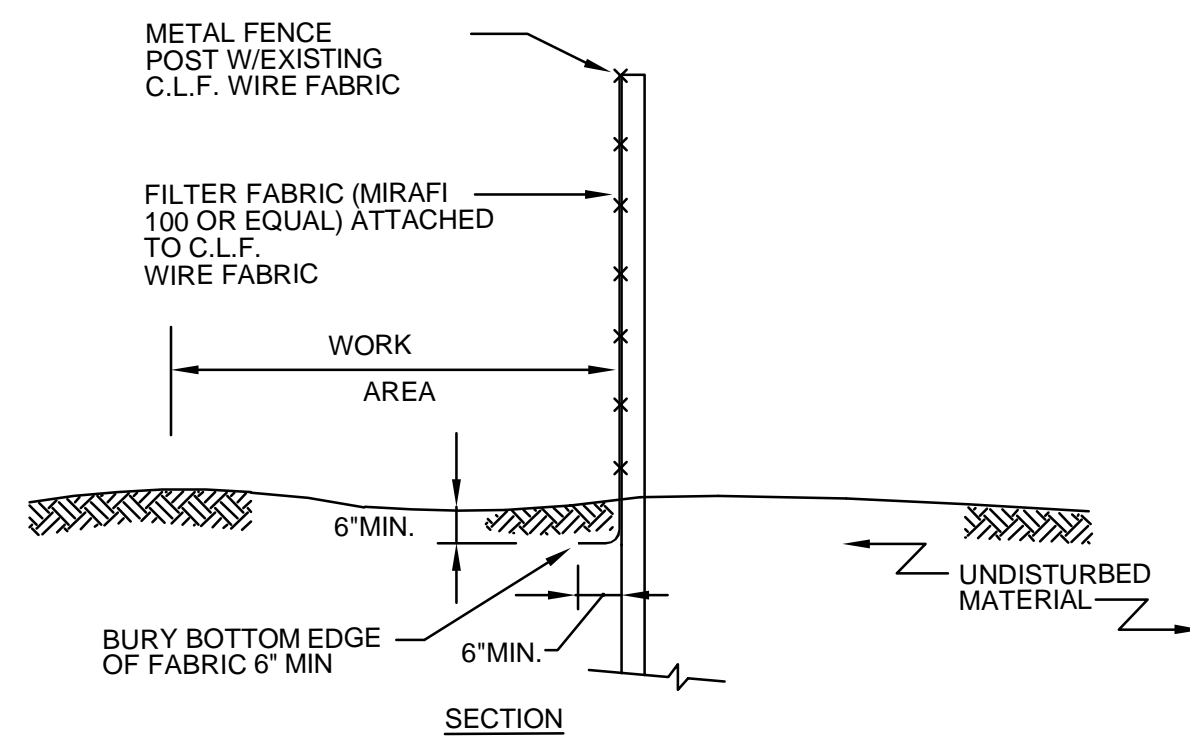
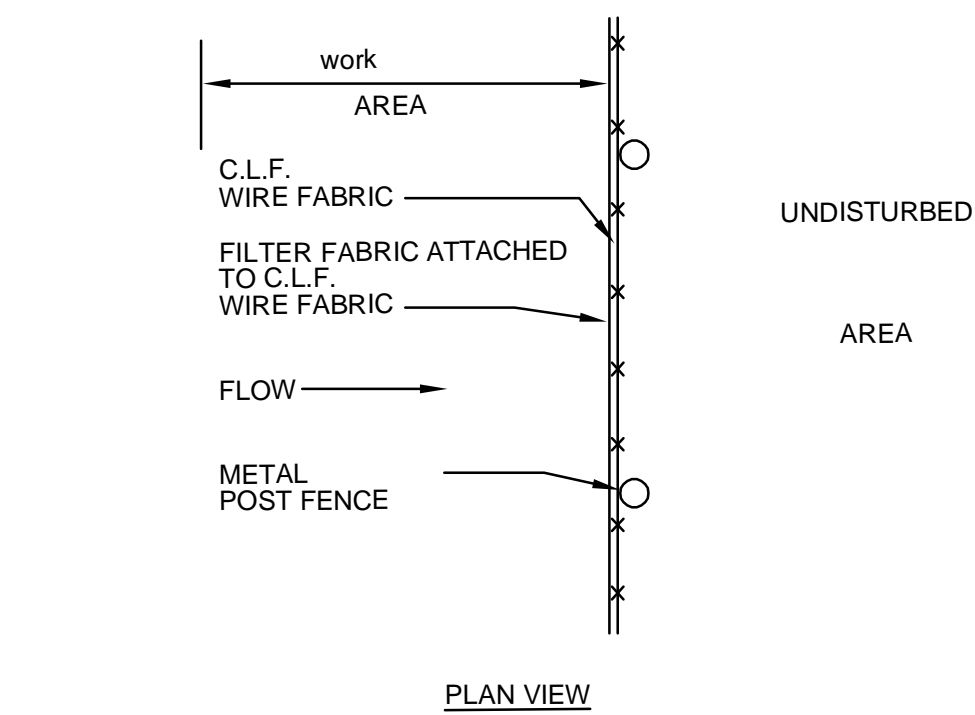
FOR REVIEW

SHEET NO.

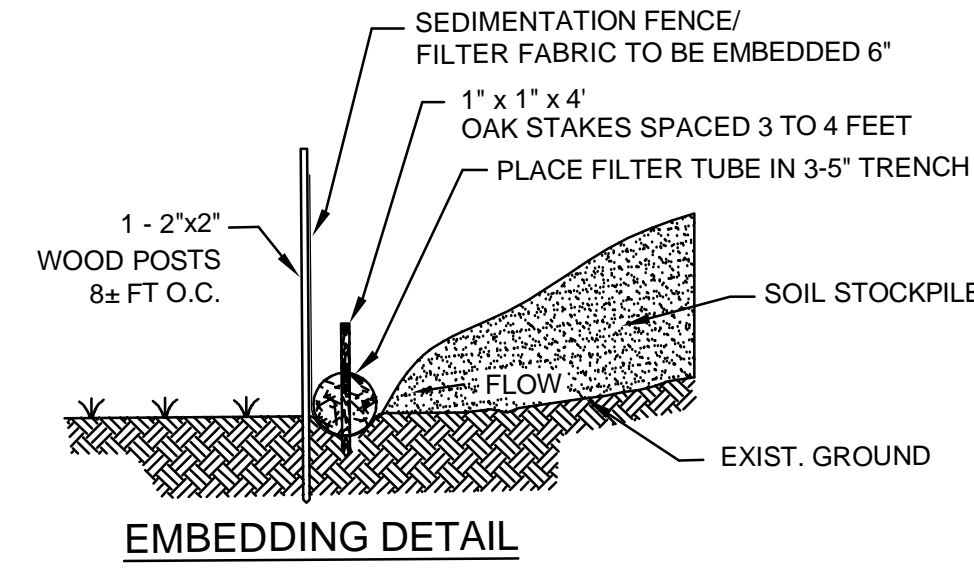
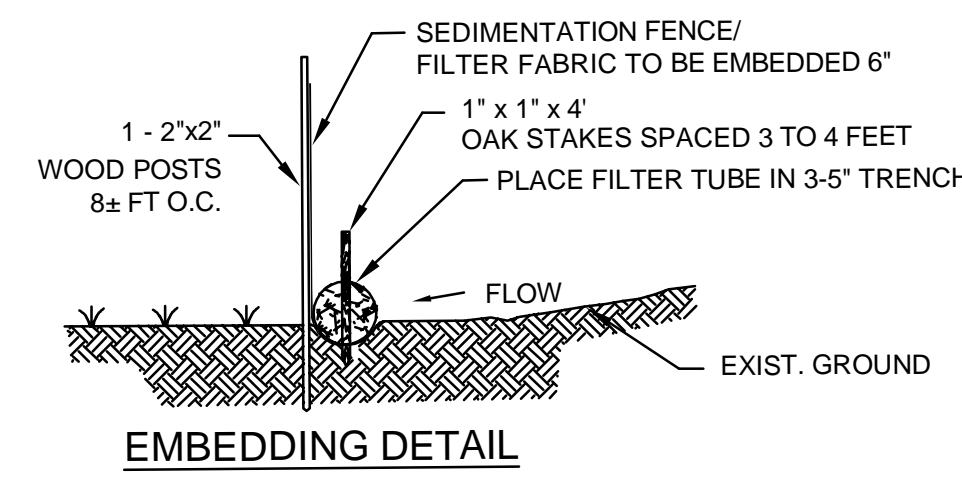
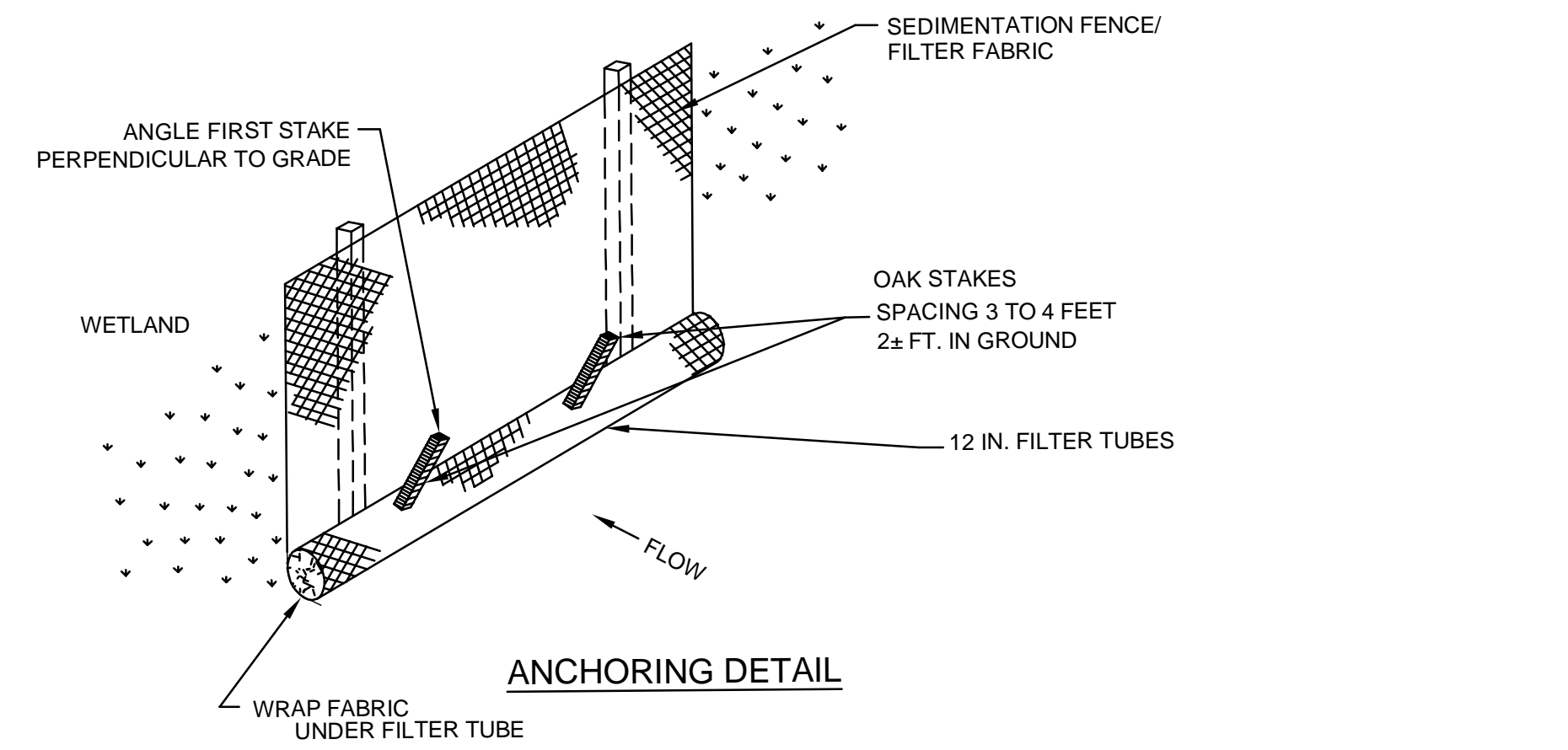


CATCH BASIN SEDIMENTATION CONTROL PROTECTION
NOT TO SCALE

NOTES:
 1. LENGTH AND WIDTH OF POLYPROPYLENE FABRIC MUST EXCEED EXISTING CATCH BASIN FRAME DIMENSIONS BY A MINIMUM OF 8\"/>

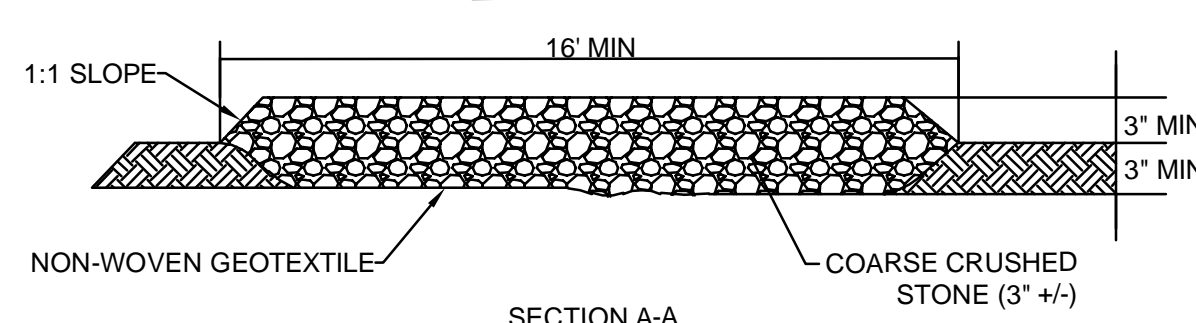
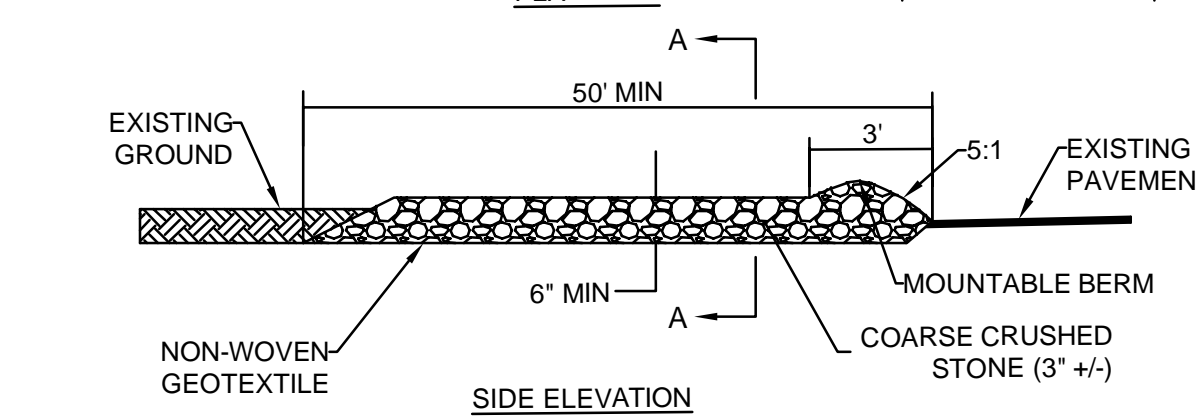
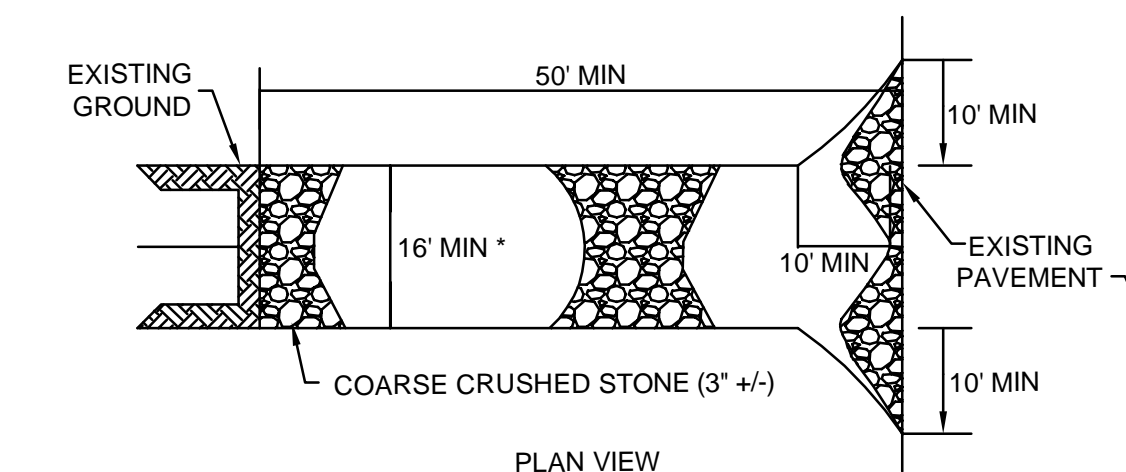


EROSION CONTROL BARRIER AT CHAIN LINK FENCE
NOT TO SCALE



NOTES
 1. FILTER TUBE SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING.
 2. FILTER TUBE SHALL BE SECURELY ANCHORED IN PLACE BY STAKES DRIVEN THROUGH THE FILTER TUBE.
 3. INSPECTION SHALL BE FREQUENT & REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 4. FILTER TUBE SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
 5. CRUSHED STONE TO BE PLACED OVER FILTER FABRIC.

EROSION CONTROL BARRIER
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE NOTES
 1. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE. EXISTING PAVEMENT MAY REMAIN.
 2. IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6\"/>

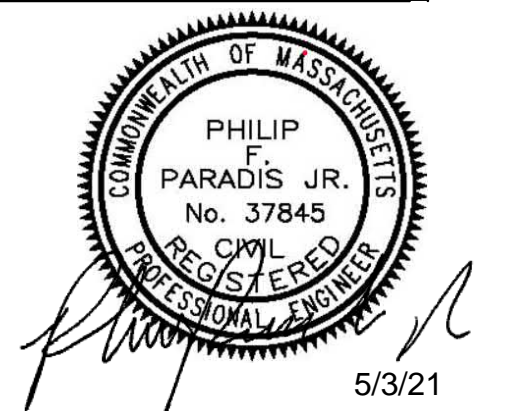
MAINTENANCE
 1. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
 2. TOP DRESS WITH CLEAN STONE AS NEEDED.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

PREPARED BY



REGISTERED PROFESSIONAL



SUBCONSULTANT

PROJECT

Wharf Street Incinerator

Weymouth, Massachusetts

TITLE

DETAILS

NO.	REVISIONS	DATE

DRAWN BY:

DESIGNED BY:

CHECKED BY:

ISSUE DATE: MAY 2021

BETA JOB NO.: 6023

SCALE

NONE

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

FOR REVIEW

SHEET NO.