MASSACHUSETTS WATER RESOURCES AUTHORITY



Chelsea Facility 2 Griffin Way Chelsea, Massachusetts 02150

> Telephone: (617) 242-6000 Facsimile: (617) 305-5990

Frederick A. Laskey Executive Director

April 14, 2022

Mr. Nicholas Moreno Boston Conservation Commission 1 City Hall Square, Room 709 Boston, MA 02201

Re: Notice of Intent – Siphon Structure n – Nashua Street

Dear Mr. Moreno and Members of the Conservation Commission,

The Massachusetts Water Resources Authority (MWRA) will be performing necessary maintenance and repair activities to improve flood protection, site access, structural conditions, operational requirements, and odor control for selected sewer siphon and junction structures in the MWRA wastewater system as part of the Siphon/Junction Structure Rehabilitation Project (Project). The attached Notice of Intent is for MWRA's Section 216, Station 11+12 (referred to as Structure n). The structure is located within 100-foot wetland buffer zone and a 25-foot riverfront protection area and a FEMA Flood Zone (Bordering Land Subject to Flooding).

The notice of intent is being submitted under the Massachusetts Wetlands Protection Act. MWRA is claiming an exemption from the municipal bylaw. MWRA's enabling act, Chapter 372 of the Acts of 1984, exempts it from local wetland bylaws. The section including this exemption is as follows:

SECTION 3

There is hereby created and placed in the executive office of environmental affairs a body politic and corporate and a public instrumentality to be known as the Massachusetts Water Resources Authority, which shall be an independent public authority not subject to the supervision or control of the executive office of environmental affairs or of any other executive office, department, commission, board, bureau, agency or political subdivision of the commonwealth except to the extent and in the manner provided in this act. The exercise by the Authority of the powers conferred by this act shall be deemed to be the performance of an essential public function.

We appreciate your time and look forward to working with you on this important Project. Please do not hesitate to contact the Project Manager, Milan Horbaczewski at <u>Milan.Horbaczewski@mwra.com</u> if you have any questions.

Sincerely,

The Colliest

John Colbert, PE Chief Engineer

Boston Conservation Commission April 14, 2022 Page 2

cc: Rebecca Weidman, Director of Environmental & Regulatory Affairs, MWRA Milan Horbaczewski, PE, Program Manager, MWRA Michael Cunningham, PE, Kleinfelder Eileen Piskura, Kleinfelder Rachel Freed, Massachusetts Department of Environmental Protection Kate Oetheimer, Assistant Conservation Agent, City of Boston

Attachments

- Appendix A: WPA Form 3 Notice of Intent
- Appendix B: Figures
 - Figure 1: USGS Locus Map
 - Figure 2: FEMA Flood Map

Figure 3: Chapter 91 Tideland Jurisdiction Map

Figure 4: Existing Site Plan Structure N

Figure 5: Proposed Site Plan Structure N

- Appendix C: Project Narrative
- Appendix D: Affidavit of Service, List of Abutters, and Notification Form
- Appendix E: Wetland Delineation Report
- Appendix F: NOI Fee Transmittal Form and Copy of Fee Checks

APPENDIX A

WPA Form 3 – Notice of Intent



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

A. General Information

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 Boston City/Town

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



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

c. Zip Code 067221 ngitude			
067221 ngitude			
ngitude			
Colbert			
9			
- Code			
14			
Code			
30			
30			
50 Code			
9 C 9			

\$500	\$207.50	\$262.50	
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid	

4



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Provided by MassDEP:

MassDEP File Number

Document Transaction Number Boston City/Town

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

A. General Information (continued)

6. General Project Description:

The MWRA is planning to perform sewer structure upgrades and create access routes to the structures as needed. Three structures are located within the City of Boston and a Notice of Intent will be submitted individually for each structure. The structure subject to this Notice of Intent is Sewer Section 216, Station 11+12.

7a. Project Type Check	list: (Limited Project	Types see Section A. 7b.)
------------------------	------------------------	---------------------------

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

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

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:

Suffolk	
a. County	b. Certificate # (if registered land)
6160	303
c. Book	d. Page Number

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

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

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



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Provided by MassDEP:

WPA Form 3 – Notice of Intent

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

MassDEP File Number

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

	<u>Resour</u>	<u>ce Area</u>	Size of Proposed Alteration	Proposed Replacement (if any) 2. linear feet	
For all projects	a. 🗌 b. 🕅	Bank Bordering Vegetated	1. linear feet 0 (no alteration proposed)		
Resource Areas, please attach a narrative explaining how the resource		Wetland	1. square feet	2. square feet	
	c. 🗌	Land Under Waterbodies and Waterwavs	1. square feet	2. square feet	
delineated.	_	,	3. cubic yards dredged		
	<u>Resour</u>	<u>ce Area</u>	Size of Proposed Alteration	Proposed Replacement (if any)	
	d. 🛛	Bordering Land	0 (no alteration proposed)	0	
		Subject to Flooding	n. square leet	2. square leet	
			3. cubic feet of flood storage lost	4. cubic feet replaced	
	e. 🗌	Isolated Land Subject to Flooding	1. square feet		
			2. cubic feet of flood storage lost	3. cubic feet replaced	
	f. 🔀	Riverfront Area	Charles River (inland) 1. Name of Waterway (if available) - sp	ecify coastal or inland	
	2.	Width of Riverfront Area	(check one):		
		🛛 25 ft Designated [Densely Developed Areas only		
		🔲 100 ft New agricul	tural projects only		
		200 ft All other pro	ojects		
	3.	Total area of Riverfront Ar	ea on the site of the proposed proje	ect: <u>105</u> square feet	
	4.	Proposed alteration of the	Riverfront Area:		
	0	(no alteration proposed)	0	0	
	a.1	total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.	
	5.	Has an alternatives analys	sis been done and is it attached to t	his NOI? Xes No	
	6.	Was the lot where the acti	vity is proposed created prior to Au	gust 1, 1996? 🛛 🛛 Yes 🗌 No	
3	3. 🗌 Co	astal Resource Areas: (Se	ee 310 CMR 10.25-10.35)		
	Note:	for coastal riverfront areas	s, please complete Section B.2.f . a	bove.	



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Provided by MassDEP:

WPA Form 3 – Notice of Intent

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

MassDEP File Number
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Boston City/Town

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

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

Online Users: Include your document		Resource Area		Size of Proposed	d Alteration	Proposed Replacement (if any)
transaction number		a. Designated Port Areas Indicate size under Land				r the Ocean, below
(provided on your receipt page) with all		b. 🗌	Land Under the Ocean	1. square feet		
supplementary information you submit to the Department.				2. cubic yards dredge	ed	
		c. 🗌	Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below		
		d. 🗌	Coastal Beaches	1. square feet		2. cubic yards beach nourishment
		e. 🗌	Coastal Dunes	1. square feet		2. cubic yards dune nourishment
				Size of Proposed	d Alteration	Proposed Replacement (if any)
		f. 🗌	Coastal Banks	1. linear feet		
		g. 🗌	Rocky Intertidal Shores	1. square feet		
		h. 🗌	Salt Marshes	1. square feet		2. sq ft restoration, rehab., creation
		i. 🗌	Land Under Salt Ponds	1. square feet		
				2. cubic yards dredge	ed	
		j. 🗌	Land Containing Shellfish	1. square feet		
		k. 🗌	Fish Runs	Indicate size und Ocean, and/or in above	ler Coastal Banl land Land Unde	ks, inland Bank, Land Under the r Waterbodies and Waterways,
		_		1. cubic yards dredge	ed	
4	1		Land Subject to Coastal Storm Flowage	1. square feet		
	4.	If the pl square amoun	roject is for the purpose of r footage that has been ente t here.	restoring or enhan pred in Section B.2	cing a wetland r 2.b or B.3.h abov	esource area in addition to the /e, please enter the additional
		a. square	e feet of BVW		b. square feet of S	alt Marsh
	5.	🗌 Pro	oject Involves Stream Cross	ings		
		a. numbe	er of new stream crossings		b. number of repla	cement stream crossings



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Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

MassDEP File Number
Document Transaction Numbe

Boston City/Town

C. Other Applicable Standards and Requirements

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

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

 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	\square	No	If yes, include proof of mailing or hand delivery of NOI to:
			Natural Heritage and Endangered Species Program Division of Fisheries and Wildlife
8/1/2021			1 Rabbit Hill Road
b. Date of map)		westborough, MA 01001

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*

(a) within wetland Resource Area

percentage/acreage

(b) outside Resource Area

percentage/acreage

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

^{*} Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <u>https://www.mass.gov/ma-</u> 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.



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

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Boston

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

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

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, <u>https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat</u>; 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
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If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and North Shore - Hull to New Hampshire border: the Cape & Islands:

Division of Marine Fisheries -Southeast Marine Fisheries Station Attn: Environmental Reviewer 836 South Rodney French Blvd. New Bedford, MA 02744 Email: <u>dmf.envreview-south@mass.gov</u> Division of Marine Fisheries -North Shore Office Attn: Environmental Reviewer 30 Emerson Avenue Gloucester, MA 01930 Email: <u>dmf.envreview-north@mass.gov</u>

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	\boxtimes	No
		_	

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

	Ma Bu	assachusetts Department of Environmental Protection reau of Resource Protection - Wetlands	Provided by MassDEP:
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	Ma	assachusetts Wetlands Protection Act M.G.L. c. 131, §40	Boston
			City/Town
	C.	Other Applicable Standards and Requirements	(cont'd)
	4.	Is any portion of the proposed project within an Area of Critical Environ	mental Concern (ACEC)?
Online Users: Include your document		a. Yes No If yes, provide name of ACEC (see instructions Website for ACEC locations). Note: electronic	s to WPA Form 3 or MassDEP filers click on Website.
number		b. ACEC	
(provided on your receipt page) with all	5.	Is any portion of the proposed project within an area designated as an (ORW) as designated in the Massachusetts Surface Water Quality Sta	Outstanding Resource Water ndards, 314 CMR 4.00?
supplementary information you		a. 🗌 Yes 🖾 No	
submit to the Department.	6.	Is any portion of the site subject to a Wetlands Restriction Order under Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restrict	the Inland Wetlands ion Act (M.G.L. c. 130, § 105)?
		a. 🗌 Yes 🖾 No	
	7.	Is this project subject to provisions of the MassDEP Stormwater Manag	gement Standards?
		 a. Yes. Attach a copy of the Stormwater Report as required by th Standards per 310 CMR 10.05(6)(k)-(q) and check if: 1. Applying for Low Impact Development (LID) site design cress Stormwater Management Handbook Vol. 2, Chapter 3) 	e Stormwater Management edits (as described in
		2. A portion of the site constitutes redevelopment	
		3. Proprietary BMPs are included in the Stormwater Manager	ment 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 sing or equal to 4 units in multi-family housing project) with no c	le-family houses or less than lischarge to Critical Areas.
	D.	Additional Information	
		This is a proposal for an Ecological Restoration Limited Project. Skip S Appendix A: Ecological Restoration Notice of Intent – Minimum Require 10.12).	ection D and complete ed Documents (310 CMR

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

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

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



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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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.

Site Plan Structure n (90% Design) a. Plan Title	
Rishabh Iyer	
b. Prepared By	c. Signed and Stamped by
October 2021	1" = 20'
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:

26427	3/3/2022
2. Municipal Check Number	3. Check date
26423	3/3/2022
4. State Check Number	5. Check date
CDW Consultants, Inc.	
6. Payor name on check: First Name	7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection Prov

Bureau of Resource Protection - Wetlands WPA Form 3 – Notice of Intent

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

vided by MassDEP:
MassDEP File Number
Document Transaction Number
Boston
City/Town

F. Signatures and Submittal Requirements

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

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

John Collient	2/28/2022
1 Signature of Applicant	2. Date
Touch Lerge	5/11/22
3. Signature of Property Owner (if diverent)	4. Date
Christine Ualsh	5/16/22
5. Signature of Representative (if any)	6. Date

For Conservation Commission:

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

For MassDEP:

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

Other:

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

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

APPENDIX B

Figures

USGS Locus Map – Structure N Boston, MA Massachusetts Water Resources Authority



Sources: MassGIS, FEMA, Klienfelder





FEMA Flood Zone Map – Structure N Boston, MA Massachusetts Water Resources Authority



Legend

FEMA National Flood Hazard Layer Legend Flood Zone Designations

- A: 1% Annual Chance of Flooding, no BFE
- AE: 1% Annual Chance of Flooding, with BFE
- AE: Regulatory Floodway
- AH: 1% Annual Chance of 1-3ft Ponding, with BFE
- AO: 1% Annual Chance of 1-3ft Sheet Flow Flooding, with Depth
- VE: High Risk Coastal Area
- D: Possible But Undetermined Hazard
- X: 0.2% Annual Chance of Flooding
- X: 1% Drainage Area < 1 Sq. Mi.
- X: Reduced Flood Risk due to Levee
- Area Not Included
- Area with no DFIRM Paper FIRMs in Effect W
- Site Location
- Sources: MassGIS, FEMA, Klienfelder







- 1. THIS BASE MAP INFORMATION WAS PREPARED BY GREEN INTERNATIONAL ASSOCIATES (GREEN). THIS PLAN WAS PREPARED FROM ACTUAL ON THE GROUND FIELD SURVEYS CONDUCTED BY GREEN FROM AUGUST 2020 TO NOVEMBER 2020.
- 2. HORIZONTAL CONTROL WAS ESTABLISHED BY GREEN ON AUGUST 25, 2020. HORIZONTAL DATUM IS BASED ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (MAINLAND) NAD83 (2011), 2010.00 EPOCH.
- 3. VERTICAL CONTROL WAS ESTABLISHED BY GREEN ON AUGUST 25, 2020. VERTICAL DATUM IS NAVD 88 (COMPUTED USING GEOID 18B) THEN CONVERTED TO MWRA SEWER DATUM. CONVERSION FROM NAVD 88 TO MWRA SEWER DATUM IS OBTAINED BY ADDING 106.427' TO THE PROJECT
- 4. THE WETLAND FLAGS SHOWN HEREON WERE PLACED BY CDW CONSULTANTS, INC. IN THE FALL OF 2020 AND WERE FIELD LOCATED BY

100% DESIGN NOT FOR CONSTRUCTI		GN RUCTION
SOURCES AUTHORITY	SIPHON/JUNCTION STRUCTURE REHABILITATION PHASE 1	DRAWING NO.
e Beacon Street, Suite 8100 Boston, MA 02108 Phone: 617-497-7800 www.kleinfelder.com	EXISTING SITE PLAN STRUCTURE N BOSTON, MA	66 of 125



NOTES 1. NO ACCESS ROAD PROPOSED FOR STRUCTURE N.

- 2. CONTRACTOR SHALL USE THE PROPOSED ACCESS CORRIDOR FOR ACCESS TO THE STRUCTURE DURING CONSTRUCTION AND LIMIT SITE DISTURBANCE TO WITHIN THE CORRIDOR. GROUND SURFACE SHALL BE PROTECTED AS REQUIRED AND RESTORED TO PRE-CONSTRUCTION CONDITIONS UPON COMPLETION OF WORK. PROTECT AND SECURE EXISTING WORK ZONE, MATERIALS, AND EQUIPMENT STORED DURING CONSTRUCTION.
- 3. PROTECT TREES ADJACENT TO TRAVEL CORRIDOR AS SHOWN ON G-001. CONTRACTOR TO ALSO PROTECT LANDSCAPING, SITE FEATURES, AND HARDSCAPE SURFACES. REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE AUTHORITY.

	100% DESIC NOT FOR CONSTR	SN RUCTION
SOURCES AUTHORITY	SIPHON/JUNCTION STRUCTURE REHABILITATION PHASE 1	
Beacon Street, Suite 8100	PROPOSED SITE PLAN	0.010
Boston, MA 02108 Phone: 617-497-7800	STRUCTURE N	
www.kleinfelder.com	BOSTON, MA	66 of 125

APPENDIX C

Project Narrative







Notice of Intent – Project Narrative

MWRA Siphon/Junction Structure Rehabilitation Project June 2022

Introduction

This Notice of Intent is submitted under the Massachusetts Wetlands Protection Act (WPA) (310 CMR 10.0000) for the proposed work associated with necessary maintenance and repair activities to improve flood protection, site access, structural conditions, operational requirements, and odor control for selected sewer siphon and junction structures in the Massachusetts Water Resources Authority (MWRA) wastewater system as part of the Siphon/Junction Structure Rehabilitation Project (Project). Three structures are located within the City of Boston (City) and, as instructed by the Commission, a Notice of Intent will be submitted individually for each structure. The structure subject to this Notice of Intent is Sewer Section 216, Station 11+12 (referred to as structure n). This structure is located within a 100-foot wetland buffer zone, within a 25-foot riverfront protection area, and Bordering Land Subject to Flooding (BLSF). MWRA sought to have this utility maintenance work exempt per 310 CMR 10.02(2)(a)2:

(a) Activities Within the Areas Subject to Protection under M.G.L. c. 131, § 40. Any activity proposed or undertaken within an area specified in 310 CMR 10.02(1), which will remove, fill, dredge or alter that area, is subject to Regulation under M.G.L. c. 131, § 40 and requires the filing of a Notice of Intent except:

2. activities conducted to maintain, repair or replace, but not substantially change or enlarge an existing and lawfully located structure or facility used in the service of the public and used to provide...water, sewer...provided said work utilizes the best practical measures to avoid or minimize impacts to wetland resource areas outside the footprint of said structure or facility. A project proponent claiming that work to remove, fill, dredge or alter an area specified in 310 CMR 10.02(1) does not require the filing of a Notice of Intent has the burden of establishing that the work is not subject to Regulation under M.G.L. c. 131, § 40.

MWRA requested the exemption in a letter dated September 16, 2021 and was instructed by the Boston Conservation Commission to submit this Notice of Intent.

Background

The MWRA has 146 sewer siphon structures and junction structures located throughout the MWRA's wastewater collection system. The MWRA, through its engineering and operations staff, conducted inspections in 2019 to review and update the recommended improvements and developed a prioritized list of 41 structures to include in this Project. The MWRA based its evaluation on both the need for improvements and flood protection.

The purpose of the Project is to improve flood protection, site access, structural conditions, operational requirements, and odor control for the selected siphon and junction structures. Increased flooding caused by climate change has the potential to inundate MWRA sewer structures located near riverine areas, which could lead to backups and overflows of sewer pipelines. This work to maintain structural integrity to avoid backups and overflows of wastewater of the sewer system is essential to preserve public health and the environment.

Location Description – Section 216, Station 11+12 (referred to as Structure n)

Structure n is located within the Nashua Street Park in the Charles River Reservation in Boston. This area is part of the Charles River Reservation, a Protected Open Space (conservation land) owned by the Massachusetts Department of Conservation and Recreation (DCR). The structure is located on the south side of the Charles River within the partially hardscaped and partially landscaped park. Current access to the structure is from Nashua Street, and construction vehicles are currently able to perform necessary maintenance work from the street.

The Boston Inner Harbor abuts the park to the north, elevated train tracks and Charles River Dam Road (Route 28) abut the park to the west, a Mass General Hospital office building abuts the park to the east and Nashua Street abuts the park to the south, beyond which is the Suffolk County Sheriff's Department building. The structure and a portion of the access route are located within a FEMA Flood Zone AE with a 1% annual chance of flooding, with Base Flood Elevation (BLSF).

In general, the sequence of work will begin with the contractor rehabilitating and lining the interior of the structure then replacing the manhole cover and roof plates. Because the site can be accessed directly from the public way, no access improvements, ground disturbance, or vegetation removal are needed and no impacts to the resource area are anticipated. Existing paved park paths will be used to bring smaller equipment and vehicles near the structure as feasible to facilitate the work. Some tree pruning of sweet gum and pin oak trees may be required for safe access of smaller vehicles to the structure and no trees will need to be removed. In accordance with the Project's environmental protection procedures specification (Section 01110), tree trimming would be completed under the supervision of an arborist. Larger vehicles associated with the structure lining that cannot fit within existing paved paths will remain on Nashua Street during the work. An Access Permit from the Massachusetts Department of Transportation is being prepared and will be submitted prior to construction.

During construction, an approximately 500-square foot staging area will be utilized east of the structure within an existing clearing, if needed by the contractor. This area is outside the Riverfront Area on a grassed area of the park and will provide space for limited storage; the majority of materials will be brought in and out daily with the construction crew, however, some machinery and equipment may be stored overnight. No materials with the potential to cause contamination will be stored overnight unless it is in a secure, weatherproof container. The staging area will be removed after construction is completed and ground surface will be returned to pre-construction conditions.

Park surfaces will be protected, and any damage will be restored to pre-construction conditions. The Project's topsoil and seeding specifications require the contractor to decompact and prepare areas to be restored and maintain seeded areas throughout the duration of a "maintenance period," which lasts one year after substantial completion, i.e. the warranty period. There are requirements within those specifications for ensuring germination, fixing erosion, and reseeding. The Project's environmental protection procedures specifications (Sections 01100, 01110) require procedures for protecting features throughout the project area, restricting operations to the limits of the designated locations, regular sweeping and dust control, and paving.

The proposed design and restoration have been reviewed by the Massachusetts Department of Conservation (DCR) through a series of pre-application meetings with the MWRA for their pending Access Permit for this project. All DCR comments have been incorporated into the design.

Boston Conservation Commission Page 3

Wetland Resource Areas/Buffer Zones

Wetland resource areas relative to the project sites were delineated in accordance with the procedures described in the WPA regulations by CDW Consultants, Inc. (CDW) through field inspections in August 2020. The Wetland Resource Evaluation and Massachusetts Department of Environmental Protection (MassDEP) BVW Field Data Forms are attached.

As previously stated, the work is proposed to be conducted within a 100-foot wetland buffer zone, within a riverfront and within a BLSF as shown on Figure 2. Additionally, structure n is located within Tidelands Jurisdiction Chapter 91 Historic High Water area as shown on Figure 3. MWRA has confirmed with MassDEP that the proposed work is maintenance of fill and structures exempt from licensing pursuant to 310 CMR 9.05(3)(c) and authorized under 310 CMR 9.22(1) without the need for Chapter 91 licensing. The project site is not located within any Areas of Critical Environmental Concern (ACEC), Natural Heritage and Endangered Species Program (NHESP) Priority Habitat or Estimated Habitat of Rare Species, or vernal pools according to data available on the Massachusetts Geographic Information System (MassGIS) Online Mapping Tool.

The project has been designed to comply with the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, Section 40) and it's implementing Regulations (310 CMR 10.00). The project meets the performance standards for each applicable resource area:

• 310 CMR 10.57(4)(a) – Bordering Land Subject to Flooding

- 1. No flood storage volume will be lost as the result of the proposed project within Bordering Land Subject to Flooding.
- 2. The work within Bordering Land Subject to Flooding will not restrict flows so as to cause an increase in flood stage or velocity.
- 3. The work is not within a portion of BLSF that is significant to the protection of wildlife habitat and will not alter more than 10% of the parcel or more than 5,000 square feet of land in the resource area.

• 310 CMR 10.58(4) – Riverfront Area

- (a) The work meets the performance standards for all other resource areas within the riverfront area.
- (b) The work is not located within a Priority Habitat or Estimated Habitats of Rare Wildlife or certified vernal pool.
- (c) There is no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects.
- (d) The work has no significant adverse impact on the riverfront area.

The wetland flags depicted on Figure 4 represent the edge of BVW as well as the top of bank. Based on the United Stated Geological Survey data for the Charles River, the highest water elevation recorded in the area of the site between July 2021 to June 2022 was at approximately 108.5 feet which represents the annual mean high water line. No alterations are proposed within the BLSF, wetland buffer zone, or the Riverfront Area. The work being conducted in these resource areas is limited to the existing structure itself.

Summary of Proposed Work

Proposed improvements to the structures include:

- <u>Waterproofing/Flood Protection</u> Providing resistance to flooding and inundation
 - o Watertight manhole ingress and internal leak sealing
- <u>Ingress</u> Improving access into the structure through top of structure modifications
 - Replace existing with new 30-inch manhole cover and galvanized plate
- <u>Structural</u> Providing structure renewal through internal surface rehabilitations and repairs
 - Internal surface lining
- <u>Mechanical/Operational</u> Providing operational enhancements through stop log/weir plate modifications
 - o None
- <u>Odor Control</u> Providing odor (and moisture) mitigation
 - o None

No access route improvements are proposed for structure n.

Alternatives Analysis

Structure n is within a promenade in the Nashua Street Park in Boston, owned by DCR. Two access routes were identified during the site visits, but access improvements are not recommended. Route n-1 is a paved path accessible from Nashua Street at Charles River Dam Road that heads east to the plaza. The path is not suitable for heavy vehicles and there is not adequate clearance under the MBTA Green Line viaduct; however, smaller vehicles can use the path to get to the edge of the promenade, which is approximately 60 feet from the structure. The contractor will be required to keep large vehicles along the edge of Nashua Street, nearest to the structure and hoses for the interior lining will be carried from there, which is approximately 80 feet. Route n-2 is a paved path accessible from Nashua Street that heads west to the promenade. Although this path is also not suitable for heavy vehicles, it is another option for smaller vehicles to get to the edge of the promenade, which is approximately 50 feet from the structure.

The proposed activities are necessary to prolong the functionality of the structure for transporting sewage and protecting the structure from floodwater inundation. Therefore, the alternative to leave the structure as is and not complete the maintenance activities was deemed infeasible.

Compliance with Massachusetts Stormwater Policy

Massachusetts Stormwater Management Policy and the standards at 310 CMR 10.05(6)(k) are generally not applicable because the Project is not creating any impervious surfaces, stormwater conveyances, or stormwater systems covered by the standards. The Stormwater standards and the manner the Project complies with them are summarized as follows:

Boston Conservation Commission Page 5

- **Standard 1:** As no new impervious surfaces will be constructed, there will be no new stormwater point source discharges to untreated stormwater into, or causing erosion to, wetlands and waters.
- **Standard 2:** Post-development peak discharge rates will not exceed pre-development peak discharge rates.
- **Standard 3:** This Project will not result in an increase in impervious area and no loss of groundwater recharge will occur.
- **Standard 4:** This Project will not result in an increase in impervious area and therefore does not require TSS removal facilities.
- **Standard 5:** This Project does not contain land uses with higher potential pollutants as described in MassDEP's Stormwater Management Policy.
- **Standard 6:** This Project will not result in any new point-source discharges and will not, therefore, discharge to or affect a critical area.
- **Standard 7:** This Project will not result in an increase in impervious areas or point source discharges and therefore, Standards 1, 2, 3, 4, 5, 6, 7, 9, and 10 are generally not applicable. Compliance with Standard 8 is discussed below.
- **Standard 8:** Erosion and sedimentation controls for construction and land disturbance activities have been incorporated into the Project design.
- **Standard 9:** No structural stormwater treatment devices are warranted or proposed for this Project (because no increase in impervious surfaces will occur), therefore, an Operation and Maintenance Plan is not necessary.
- **Standard 10:** No illicit discharges to a stormwater management system will occur.

Environmental Controls and Additional Permitting

Structure n is located within a hardscaped and landscaped public park. MWRA does not anticipate any earth disturbance as a result of the proposed work and will instruct the contractor to keep limited vehicle traffic to paved areas only. The proposed work at this site will be on and within the existing structure, which is in a hardscaped area, and construction will not produce sediment. As a result, MWRA does not anticipate installing erosion and sediment controls. However, should unanticipated conditions require any earth disturbance MWRA will instruct the contractor to install erosion and sediment controls around the work area prior to earth disturbance. The contractor will also be instructed to repair any damage to the park facilities to pre-construction condition. Necessary environmental and construction permits will be obtained prior to the start of work at each project area. Permit requirements will be followed as feasible and practical to maintain compliance with applicable regulations.

APPENDIX D

Affidavit of Service, List of Abutters, and Notification Form





AFFIDAVIT OF SERVICE FOR ABUTTER NOTIFICATION

Under the Massachusetts Wetlands Protection Act and Boston Wetlands Ordinance

I, <u>Christine Walsh</u>, hereby certify under pains and penalties of perjury that that at least one week prior to the public hearing, I gave notice to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent	was filed under the Massachusetts Wetlands Protection	Act	
and/or the Boston Wetlands Ordinance by <u>MWRA</u> fo			
necessary maintenance and repair activities for MWRA Sewer Section 216, Station 11+12 (structure n)			
located at Nashua Street, Boston, MA			

The Abutter Notification For, the list of abutters to whom it was given, and their addresses are attached to this Affidavit of Service.

Christine Walsh Digitally signed by Christine Walsh Date: 2022.05.25 14:18:40 -04'00'

Name

5/25/2022

Date

List of Abutters

PARCEL ID	PROPERTY ADDRESS	CITY	ZIPCODE	OWNER	ADDRESSEE	MAILING ADDRESS	MAILING CITY	MAILING STATE	MAILING ZIPCODE
301931000	NASHUA ST	BOSTON	02114	COMMONWLTH OF MASS		NASHUA	BOSTON	MA	02114
300942000	4 CHARLES RIVER DAM	BOSTON	02114	COMMWLTH OF MASS		CHARLES RIVER DAM	BOSTON	MA	02114
301929000	NASHUA ST	BOSTON	02114	COMMWLTH OF MASS		NASHUA	BOSTON	MA	02114
301934200	NASHUA ST	BOSTON	02114	COMMONWEALTH OF MASS DCAM	C/O COMMONWEALTH OF MASS	NASHUA ST	BOSTON	MA	02114
301935003	CHARLES ST	BOSTON	02114	COMMWLTH OF MASS		CHARLES	BOSTON	MA	02114
300943000	LEVERETT ST	BOSTON	02114	COMMWLTH OF MASS		LEVERETT	BOSTON	MA	02114





NOTIFICATION TO ABUTTERS BOSTON CONSERVATION COMMISSION

In accordance with the Massachusetts Wetlands Protection Act, Massachusetts General Laws Chapter 131, Section 40, and the Boston Wetlands Ordinance, you are hereby notified as an abutter to a project filed with the Boston Conservation Commission.

A. <u>Massachusetts Water Resources Authority (MWRA)</u> has filed a Notice of Intent with the Boston Conservation Commission seeking permission to alter an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, section 40) and Boston Wetlands Ordinance.

B. The address of the lot where the activity is proposed is Nashua Street, Boston, MA

C. The project involves <u>necessary maintenance and repair activities for MWRA Sewer Section 216, Station 11+12 (structure n)</u>.

D. Copies of the Notice of Intent may be obtained by contacting the Boston Conservation Commission at **CC@boston.gov**.

E. Copies of the Notice of Intent may be obtained from <u>Milan Horbaczewski</u> by contacting them at <u>Milan.Horbaczewski@mwra.com</u> between the hours of <u>9 AM to 5 PM</u>, <u>Monday through Friday</u>.

F. In accordance with the Chapter 20 of the Acts of 2021, the public hearing will take place **virtually** at <u>https://zoom.us/j/6864582044</u>. If you are unable to access the internet, you can call 1-929-205-6099, enter Meeting ID 686 458 2044 # and use # as your participant ID.

G. Information regarding the date and time of the public hearing may be obtained from the **Boston Conservation Commission** by emailing <u>CC@boston.gov</u> or calling (617) 635-3850 between the hours of 9 AM to 5 PM, Monday through Friday.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the **Boston Herald**.

NOTE: Notice of the public hearing, including its date, time, and place, will be posted on <u>www.boston.gov/public-notices</u> and in Boston City Hall not less than forty-eight (48) hours in advance. If you would like to provide comments, you may attend the public hearing or send written comments to <u>CC@boston.gov</u> or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

NOTE: If you would like to provide comments, you may attend the public hearing or send written comments to <u>CC@boston.gov</u> or Boston City Hall, Environment Department, Room 709, 1 City Hall Square, Boston, MA 02201

NOTE: You also may contact the Boston Conservation Commission or the Department of Environmental Protection Northeast Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call: the Northeast Region: (978) 694-3200.

NOTE: If you plan to attend the public hearing and are in need of interpretation, please notify staff at <u>CC@boston.gov</u> by 12 PM the day before the hearing.

CITY of **BOSTON**

1 CITY HALL SQUARE BOSTON, MA 02201-2021 | ROOM 709 | 617-635-3850 | CC@BOSTON.GOV

APPENDIX E

Wetland Delineation Report



September 3, 2020

Re: MWRA structure n Wetland Delineation

Dear Sir or Madam:

On August 26, 2020 William E. Kuriger, Ph.D. delineated wetlands at the above referenced structure. The delineations were at the top of banks and annual high water locations, with some bordering vegetated wetlands (BVW) within the wetland flags at some locations. At this location portions of the upland were developed (concrete and stone), and the wetland within the delineation flags substratum was installed stone.

The flags 11-1 to 11-8 were used and placed at some locations on concrete or stone installations. The delineations were completed during drought conditions. United States Army Corps of Engineers Wetland Delineation Automated Forms version ADF_NCNE_v1.15. Copies of the forms are attached. A copy of the soil map for the site from the U.S.D.A. Natural Resources Service is also attached.

Sincerely,

William El cuyou

William E. Kuriger, Ph.D., P.W.S., L.S.P. Environmental Scientist Certified Wetland Scientist (NH) 069 Senior Professional Wetland Scientist (SWS) Licensed Site Professional (MA) 8104

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: MWRA I	Dn				City/Co	ounty: Medford			Sampling Date:	08/26/20
Applicant/Owner: <u>N</u>	IWRA						State:	MA	Sampling Point	: 5 Upland
Investigator(s): W. E. K	Kuriger					Section, Town	ship, Range:			
Landform (hillside, terra	ce, etc.):	Side slope			Local relief (co	oncave, convex,	none): <u>Conca</u>	ve	Slope	e %: <u>0-3</u>
Subregion (LRR or MLR	A): LRR F	R, MLRA 144A	Lat:	329803		Long: 4	692676		Datum:	1983
Soil Map Unit Name: <u>L</u>	Jrban land, v	wet substratum					NWI classi	fication:	Riverine	
Are climatic / hydrologic	conditions of	on the site typica	al for t	this time of y	/ear?	Yes	No <u>x</u>	(If no, e	explain in Remarks	s.)
Are Vegetationaswaaa;,	Soil	, or Hydrology		significantly	disturbed?	Are "Norma	I Circumstance	es" pres	ent? Yes <u>x</u>	No
Are Vegetation,	Soil	, or Hydrology		naturally pro	oblematic?	(If needed, e	explain any an	swers ir	Remarks.)	
		• • •								

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

Hydrophytic Vegetation Present?	Yes	No x	Is the Sampled Area within a Wetland? Yes No X If yes, optional Wetland Site ID:
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	
Remarks: (Explain alternative procedu Drought conditions present.	res here or in a	separate report.)	

HYDROLOGY

Wetland Hydrology Indica	tors:		Secondary Indicators (minimum of two required)							
Primary Indicators (minimur	<u>n of one is requir</u>	red; check all	that apply)		Surface Soil Cracks (I	Surface Soil Cracks (B6)				
Surface Water (A1)		Water-	Stained Leaves (B9)		Drainage Patterns (B10)					
High Water Table (A2)		Aquati	c Fauna (B13)		Moss Trim Lines (B16	Moss Trim Lines (B16)				
Saturation (A3)		Marl D	eposits (B15)		Dry-Season Water Table (C2)					
Water Marks (B1)		Hydrog	gen Sulfide Odor (C1)		Crayfish Burrows (C8))				
Sediment Deposits (B2))	Oxidize	ed Rhizospheres on Living F	Roots (C3)	Saturation Visible on	Aerial Imagery (C9)				
Drift Deposits (B3)		Preser	nce of Reduced Iron (C4)		Stunted or Stressed F	Plants (D1)				
Algal Mat or Crust (B4)		Recen	t Iron Reduction in Tilled So	ls (C6)	Geomorphic Position	(D2)				
Iron Deposits (B5)		Thin M	luck Surface (C7)		Shallow Aquitard (D3)	1				
Inundation Visible on A	erial Imagery (B7	Microtopographic Reli	ef (D4)							
Sparsely Vegetated Cor	ncave Surface (E	FAC-Neutral Test (D5)							
Field Observations:										
Surface Water Present?	Yes	No x	Depth (inches):							
Water Table Present?	Yes	No x	Depth (inches):							
Saturation Present?	Yes	No x	Depth (inches):	Wetlar	Wetland Hydrology Present? Yes No X					
(includes capillary fringe)			,							
Describe Recorded Data (st	tream gauge, mo	nitoring well,	aerial photos, previous insp	ections), if	available:					
,		0 /		,,						
Remarks:										

VEGETATION – Use scientific names of plants.

Sampling Point: 5 Upland

Trace Other (Dist size 20)	Absolute	Dominant	Indicator	Deminente Test werkehest
<u>Tree Stratum</u> (Plot size: <u>30</u>)	% Cover	Species?		Dominance Test worksneet:
Platanus occidentalis	50	Yes		Number of Dominant Species
2. Malus sylvestris	15	Yes		That Are OBL, FACW, or FAC:(A)
 Liriodendron tulipifera 4. 	10	No	FACU	Total Number of Dominant Species Across All Strata: 4 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
7.				Prevalence Index worksheet:
	75	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)				$OBL \text{ species } 0 \qquad x 1 = 0$
, 1				FACW species 50 $\times 2 = 100$
2				EAC species $50 \times 3 = 150$
3				$\frac{1}{100} = \frac{1}{100} = \frac{1}$
				$\frac{11}{10} = \frac{15}{10} = 15$
T				Column Totalo: 125 (A) 265 (P)
o				Column Totals. 125 (A) <u>305 (B)</u>
б				Prevalence Index = B/A = <u>2.92</u>
/				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5_)				2 - Dominance Test is >50%
1. <u>Scutellaria nervosa</u>	50	Yes	FAC	3 - Prevalence Index is ≤3.0 ¹
2. Grasses (unidentified)	20	Yes		4 - Morphological Adaptations ¹ (Provide supporting
3				data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydrology must
6.				be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				Tree Weeds plants 2 in (7.0 am) as more in
9.				diameter at breast height (DBH), regardless of height.
10.				
11				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3 28 ft (1 m) tall
12				
12.		-Total Covor		Herb – All herbaceous (non-woody) plants, regardless
Weedy Vine Stratum (Plat size) 20	10			of size, and woody plants less than 5.20 it tall.
Woody vine Stratum (Piot size)				Woody vines – All woody vines greater than 3.28 ft in
1				neight.
2.				Hydrophytic
3				Vegetation
4				Present? Yes <u>No x</u>
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

(inches) 0-12	N/GILLY		Redo	v Footur	.06			·
0-12	Color (moist)	%	Color (moist)	%	Type ¹	loc^2	Texture	Remarks
	10VR 5/3				<u>- Type</u>			Romano
10.16	1011C 5/5							
12-10	1011 0/4							
		<u> </u>						
		······································						
		<u> </u>						
¹ Type: C=Conc	centration, D=Depl	etion, RM	=Reduced Matrix, N	/IS=Mas	ked Sand	Grains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil Ind	licators:						Indicators for	Problematic Hydric Soils ³ :
Histosol (A	1)		Polyvalue Belc	ow Surfa	ce (S8) (I	.RR R,	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Epipe	edon (A2)		MLRA 149B	5) - (00)			Coast Prair	ie Redox (A16) (LRR K, L, R)
Black Histic	C (A3)		Thin Dark Surf	ace (S9) (LRR R,	MLRA 14	49B) <u>5 cm Muck</u>	y Peat or Peat (S3) (LRR K, L, F
Hydrogen S	Sulfide (A4)		High Chroma	Sands (S	511) (LRF	(K, L)	Polyvalue E	Below Surface (S8) (LRR K, L)
Stratified La	ayers (A5) alow Dark Surface	(11)	Loamy Mucky	Motrix ((F1) (LKF (F2)	(r , L)		Surface (S9) (LRR N, L)
Depieted B	Surface (A12)	(ATT)	LOany Gleyed	iviau ix (ΓΖ)		IIOII-IMaliya	Electricity Soile (E10) (MLDA 14
	Surface (ATZ)		Depleted Math	ix (F3) urfaco (E	6)			(1000)
Sandy Ride	vod Matrix (S4)		Neulox Dark St		(E7)		Nesic Opoc	t Material (E21)
Sandy Bod			Depleted Dark		;(<i>[1]</i> 0)			Γ Material (F21)
Sanuy Reu	OX(33)				0)		Very Shance	Jw Dark Sullace (F22)
Stripped Ma	aunx (30) ce (S7)		iviaii (F 10) (LK	(K K, L)				iain in Remarks)
³ Indicators of h	vdrophytic vegetati	ion and we	etland hydrology mu	ust be pr	resent, un	less distu	rbed or problematic.	
Restrictive Lay	/er (if observed):		, , , , , , , , , , , , , , , , , , , ,				·	
Туре:								
Denth (inch	ies):						Hydric Soil Present?	Vec Ne Y

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: MWRA	ID n			(City/County:	Medford	t		٤	Sampling Date:	08/2	6/20
Applicant/Owner:	MWRA						Stat	ie:N	٨N	Sampling Poin	t: <u>5 v</u>	Wetland
Investigator(s): W. E.	. Kuriger				Sec	tion, Tov	<i>w</i> nship, Rang	e:				
Landform (hillside, terr	race, etc.):	Side slope		Local re	əlief (concave	e, conve	x, none): <u>Cor</u>	icave		Slope	e %:	0-3
Subregion (LRR or ML	RA): LRR	R, MLRA 144A	Lat: 329	9803		Long:	4692676			Datum:	1983	3
Soil Map Unit Name:	Urban land,	wet substratum					NWI cla	ssifica	ition:	Riverine		
Are climatic / hydrolog	ic conditions	on the site typica	al for this	time of year?	Υe	es	No <u>x</u>	(If	no, e>	kplain in Remark	s.)	
Are Vegetationaswaaa	, Soil	, or Hydrology	sigr	nificantly disturbe	ed? Ar	re "Norm	nal Circumsta	nces"	preser	nt? Yes <u>x</u>	No	
Are Vegetation	, Soil	, or Hydrology	nat	urally problemati	ic? (If	f needed	l, explain any	answe	ers in I	Remarks.)		
SUMMARY OF FI	INDINGS -	- Attach site	map sh	owing samp	ling point	t locat	ions, trans	ects	, imp	ortant featu	res,	etc.

Hydrophytic Vegetation Present?	Yes	Х	No	Is the Sampled Area
Hydric Soil Present?	Yes	х	No	within a Wetland? Yes X No
Wetland Hydrology Present?	Yes	Х	No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures h Drought conditions present. Solid installed	ere or rock ur	in a se ider riv	parate report.) ⁄er water.	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
x Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
x Saturation (A3) Marl Deposits (B15)	x Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Oc	or (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizosphere	es on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	d Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction	n in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	marks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes x No Depth (inch	es):
Water Table Present? Yes x No Depth (inch	es):
Saturation Present? Yes x No Depth (inch	es): Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	previous inspections), if available:
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VEGETATION – Use scientific names of plants.

Sampling Point: 5 Wetland

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>None</u> 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
3				Total Number of Dominant Species Across All Strata: 2 (B)
5.				Percent of Dominant Species
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)				OBL species $50 \times 1 = 50$
1. Amorpha fruticosa	25	Yes	FACW	FACW species 25 x 2 = 50
2.				FAC species 0 x 3 = 0
3.				FACU species 0 x 4 = 0
4.				UPL species $0 \times 5 = 0$
5.				Column Totals: 75 (A) 100 (B)
6				Prevalence Index = $B/A = 1.33$
7				Hydrophytic Vegetation Indicators:
	25	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5)				X 2 - Dominance Test is >50%
1 Typha latifolia	50	Yes	OBI	X_{3} - Prevalence Index is <3.0 ¹
2		103		4 - Morphological Adaptations ¹ (Provide supporting
2				data in Remarks or on a separate sheet)
5				Droblematic Undrophytic Magatation ¹ (Evaluin)
4				
5.				¹ Indicators of hydric soil and wetland hydrology must
б 7				Definitions of Vegetation Strata:
8				Deminions of Vegetation offata.
9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10 11				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12	50	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30)				We advertise a All we advertise a mester than 2.20 ft in
1				height.
2				Undersets die
3				Hydropnytic Vegetation
4				Present? Yes X No x
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			

Profile Desc	ription: (Describe	to the dep	oth needed to doc	ument t	he indica	itor or co	onfirm the absence of	of indicator	'S.)	
(inches)	Color (moist)	%	Color (moist)	% reatu	Type ¹	loc^2	Texture		Remarks	
					190		TOXICIO		rtomante	
0-20		100							Solid installed	rock
		· <u> </u>			· <u> </u>					
					·					
		· ·		·						
		· ·								
		· <u> </u>								
					·					
¹ Type: C=Co	ncentration D=Dep	letion RM	=Reduced Matrix	MS=Mas	ked Sand	Grains	² Location	PI =Pore I ir	ning M=Matri	x
Hydric Soil I	ndicators:						Indicators	for Problen	natic Hvdric	Soils ³ :
Histosol	(A1)		Polyvalue Bel	ow Surfa	ice (S8) (LRR R.	2 cm M	uck (A10) (I	LRR K. L. ML	RA 149B)
Histic Ep	ipedon (A2)		MLRA 149E	3)	()(,	Coast F	Prairie Redo	x (A16) (LRR	K. L. R)
Black His	stic (A3)		Thin Dark Sur	-, face (S9) (I RR R		(49B) 5 cm M	ucky Peat o	r Peat (S3) (I	RRKIR)
Hydroge	n Sulfide (A4)		High Chroma	Sands (S	S11) (I RI	2 K I)	Polyval	ue Below Si	urface (S8) (I	
Stratified	Lavers (A5)		L oamy Mucky	Mineral	(F1) (LR	акі) акі)	T biy tai	ark Surface	(S9) (I RR K	1)
	Below Dark Surface	⊃ (Δ11)	Loamy Glever	Matrix /	(F2)	τ ι , μ)	Iron-Ma		(00) (Errit II ,	-/
Thick Da	rk Surface (Δ12)	5 (711)	Depleted Matr	iv (F3)	(12)		Piedmo	nt Floodolai	in Soils (F19)	(MI RA 149B
Sandy M	ucky Mineral (S1)		Beday Dark S	urface (F	=6)		Mesic S	Snodic (TA6) / MI PA 1 //	(MERA 1430
Candy M	leved Matrix (S1)		Depleted Dark		(E7)		Red Pa	ront Matoria) (111 – 174 1 (F21)	A, 140, 140D)
Sandy B			Depieted Dark	oiono (E	= (1 <i>1</i>) :0)				ai (EZI) Surface (E22	`
Salidy K	Motrix (S6)		Mod (E10) (LE		0)		Very Si	Tallow Dark Evoloin in P	omorka))
Suipped	face (87)		Man (F10) (LF	(\mathbf{R}, \mathbf{L})				схріантін к	emarksj	
Dark Sur	lace (57)									
³ Indicators of	bydrophytic vogotat	tion and w	atland bydrology m	uat ha n	rocont ur	loop diat	urbod or problematic			
Restrictive I	aver (if observed):		elianu nyurology m	usi be p	ieseni, ui					
Type:	ayer (il observed).	~k								
		51	,							
Depth (ir	iches):						Hydric Soil Prese	ent?	Yes x	No
Remarks:										
This data for	m is revised from No	orthcentral	and Northeast Rec	jional Su	Ipplemen	Version	2.0 to include the NR	CS Field In	dicators of Hy	/dric Soils,
Version 7.0,	2015 Errata. (http://v	vww.nrcs.u	isda.gov/Internet/F	SE_DO	CUMENT	S/nrcs14	2p2_051293.docx)			



USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey

Ν	AP LEGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest	AOI) Stony Spot	The soil surveys that comprise your AOI were mapped at 1:25,000.
Soils Soil Map Unit Pe Soil Map Unit Li Soil Map Unit Pe Special Point Features	lygons 🔊 Very Stony Spot les v Wet Spot ints Other Special Line Features Water Eastures	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.
 Blowout Borrow Pit Clay Spot Closed Depress Gravel Pit Gravelly Spot Landfill Lava Flow Marsh or swamp Mine or Quarry Miscellaneous V Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroder Sinkhole Slide or Slip Sodic Spot 	Arter Freatures Streams and Canals Transportation HIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	 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: Sep 11, 2019—Oct 5, 2019 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	6.7	18.1%
602	Urban land, 0 to 15 percent slopes	1.7	4.6%
603	Urban land, wet substratum, 0 to 3 percent slopes	28.4	77.3%
Totals for Area of Interest		36.8	100.0%



APPENDIX F

NOI Fee Transmittal Form and Copy of Fee Checks



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands NOI Wetland Fee Transmittal Form

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

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



Α.	Арр	licant	Information
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1. Location of F	roject:	
Nashua Street		Boston
a. Street Addres	s	b. City/Town
26423		\$237.50
c. Check numbe	r	d. Fee amount
2. Applicant Ma	iling Address:	
John		Colbert
a. First Name		b. Last Name
Massachuse	ts Water Resources Au	thority (MWRA)
c. Organization		
100 First Ave	nue, Building 39	
d. Mailing Addre	SS	
Boston		MA 02129
e. City/Town		f. State g. Zip Code
		John.Colbert@MWRA.com
h. Phone Number	i. Fax Numbe	r j. Email Address
3. Property Ow	ner (if different):	
Priscilla		Geigis
a. First Name		b. Last Name
Deputy Com	missioner of the Depart	ment of Conservation and Recreation
c. Organization		
251 Causew	ay Street, Suite 600	
d. Mailing Addre	SS	
Boston		MA 02114
e. City/Town		f. State g. Zip Code
617-626-125	0	priscilla.geigis@mass.gov
h. Phone Number	i. Fax Numbe	j. Email Address

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

B. Fees

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

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

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

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

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

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

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



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands NOI Wetland Fee Transmittal Form

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

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Utility structure maintenance	1	\$500	\$500
	·		·
	Step 5/To	tal Project Fee:	\$500
	Step 6/I	Fee Payments:	
	Total I	Project Fee:	\$500 a. Total Fee from Step 5
	State share	of filing Fee:	\$237.50 b. 1/2 Total Fee less \$ 12.50
City/Town share of filling Fee:		\$262.50 c. 1/2 Total Fee plus \$12.50	

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection Box 4062 Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)