

STATE OF NEW HAMPSHIRE INTER-DEPARTMENT COMMUNICATION

DATE: October 25, 2023

FROM: Joshua Brown
Wetlands Program Analyst

AT (OFFICE): Department of
Transportation

SUBJECT Dredge & Fill Application
Portsmouth, 43760

Bureau of
Environment

TO Karl Benedict, Public Works Permitting Officer
New Hampshire Wetlands Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Forwarded herewith is the application package prepared by NH DOT Bureau of Turnpikes for the subject minimum impact project. The project is located along Interstate 95 in the Town of Portsmouth, NH. NHDOT proposes the construction of three soundwall sections and one privacy fence along Interstate 95 (I-95) in Portsmouth, New Hampshire to provide traffic noise mitigation related to the completed Portsmouth-York Hard Shoulder (PTSU) Project 16189B. Total impacts include 2,905 ft² of permanent impacts to delineated wetlands within the NHDOT Right-of-Way.

This project was reviewed at the Natural Resource Agency Coordination Meeting on April 19, 2023. A copy of the minutes has been included with this application package. A copy of this application and plans can be accessed on the Departments website via the following link: <https://www.dot.nh.gov/projects-plans-and-programs/programs/environmental-management-system/project-management-section-0>.

NHDOT anticipates and request that this project be reviewed and permitted by the Army Corp of Engineers through the State Programmatic General Permit process. A copy of the application has been sent to the Army Corp of Engineers.

Mitigation was determined to not be required as the proposed work is below the threshold for mitigation requirements.

Erosion Control Plans contained within this application should be considered final in accordance with Env-Wt 527.05(a).

The lead people to contact for this project are Sam Newsom, Bureau of Turnpikes (485-3806 or sam.b.newson@dot.nh.gov) or Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment (271-3226 or Andrew.O'Sullivan@dot.nh.gov).

A payment voucher has been processed for this application (Voucher #76423) in the amount of \$400.00.

If and when this application meets with the approval of the Bureau, please send the permit directly to Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment.

JRB;
cc:
BOE Original
Town of Portsmouth (4 copies via certified mail)
Marika Labash, NH Division of Historic Resources (Cultural Review Within)
Mike Dionne & Kevin Newton, NH Fish & Game (via electronic notification)

Maria Tur, US Fish & Wildlife (via electronic notification)
Jeanie Brochi, US Environmental Protection Agency (via electronic notification)
Michael Hicks & Rick Kristoff, US Army Corp of Engineers (via electronic notification)
Kevin Nyhan, BOE (via electronic notification)

Portsmouth Soundwalls along I-95

Portsmouth, New Hampshire

PREPARED FOR

NH Department of Transportation
PO Box 483; 7 Hazen Drive
Concord, NH 03302-0483
603.271.3226

PREPARED BY

VHB
2 Bedford Farms Drive, Suite 200
Bedford, NH 03110
603.391.3900

October 2023

Table of Contents

NHDES Wetlands Permit Application Form

Figure 1 - USGS Location Map

Figure 2 - Aerial Overview Map

Avoidance and Minimization Checklist

Application Narrative:

- 1. Introduction 1**
- 2. Site Description and Existing Conditions 1**
 - 2.1 Natural Resource Desktop Review 1
 - 2.2 Natural Resource Delineation 2
 - 2.3 Rare, Threatened, and Endangered Species 3
- 3. Project Description, Impact Analysis, and Best Management Practices 4**
 - 3.1 Proposed Work 4
 - 3.2 Impact Analysis 4
 - 3.3 Best Management Practices 5
- 4. Cultural Resources 5**
- 5. Federal and Local Coordination 5**
- 6. Project-Specific Requirements (Env-Wt 500) 6**
 - 6.1 Env-Wt 527.02: Approval Criteria for Public Highways 6
 - 6.2 Env-Wt 527.03: Application Requirements for Public Highway Projects 7
 - 6.3 Env-Wt 527.04: Design Requirements for Public Highway Projects 7
 - 6.4 Env-Wt 527.05: Construction Requirements for Public Highway Projects 8

Appendices

Appendix A Natural Resource Agency Coordination Meeting Minutes
Appendix B NHB DataCheck Report
Appendix C USFWS IPaC Report & Correspondence
Appendix D NHDHR Section 106 Consultation
Appendix E ACOE Appendix B
Appendix F Representative Site Photo Log
Appendix G Construction Sequence Narrative
Appendix H Project Mapping
Appendix I Environmental Field Work Memo
Appendix J Wetland Impact Plans
Appendix K Erosion Control Plans



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

Water Division/Land Resources Management
Wetlands Bureau
[Check the Status of your Application](#)



RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: NH Department of Transportation

TOWN NAME: Portsmouth

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the [Waiver Request Form](#).

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))	
Please use the Wetland Permit Planning Tool (WPPT) , the Natural Heritage Bureau (NHB) DataCheck Tool , the Aquatic Restoration Mapper , or other sources to assist in identifying key features such as: priority resource areas (PRAs) , protected species or habitats , coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the property contain a PRA? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04. • Protected species or habitat? <ul style="list-style-type: none"> ○ If yes, species or habitat name(s): N/A ○ NHB Project ID #: 22-3853 • Bog? • Floodplain wetland contiguous to a tier 3 or higher watercourse? • Designated prime wetland or duly-established 100-foot buffer? • Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone? 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • Name of Local River Management Advisory Committee (LAC): <input style="width: 50px;" type="text"/> • A copy of the application was sent to the LAC on Month: <input style="width: 30px;" type="text"/> Day: <input style="width: 30px;" type="text"/> Year: <input style="width: 30px;" type="text"/> 	

irm@des.nh.gov or (603) 271-2147

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For dredging projects, is the subject property contaminated? • If yes, list contaminant: N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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For stream crossing projects, provide watershed size (see [WPPT](#) or Stream Stats):
N/A

SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))

Provide a **brief** description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.

The NH Department of Transportation (NHDOT) proposes to permanently impact 2,905 square feet of palustrine wetlands to construct a soundwall within the Interstate 95 right-of-way to mitigate highway traffic noise within a residential neighborhood in Portsmouth, NH.

NHDOT proposes the construction of three soundwall sections and one privacy fence along Interstate 95 (I-95) in Portsmouth, New Hampshire to provide traffic noise mitigation related to the completed Portsmouth-York Hard Shoulder (PTSU) Project 16189B. The North Soundwall (with one section) will be approximately 3,450 linear feet with an average height of 23 feet and constructed from precast concrete. The South Soundwall (with two sections) will be approximately 2,500 linear feet with an average height of 21 feet and constructed from precast concrete. The Privacy Fence will consist of a 36-inch to 55-inch concrete privacy fence/barrier, totaling approximately 1,300 linear feet.

There are no wetland impacts associated with the North Soundwall or the Privacy Fence. However, the South Soundwall will require a total of approximately 2,905 square feet (sq ft) of permanent palustrine wetland impacts, including about 107 sq ft of permanent impact to Wetland 1 and about 2,798 sq ft of impact to Wetland 2. No temporary wetland impacts would be needed to construct the soundwall.

SECTION 3 - PROJECT LOCATION

Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.

ADDRESS: **I-95 ROW**

TOWN/CITY: **Portsmouth**

TAX MAP/BLOCK/LOT/UNIT: **N/A, NHDOT ROW**

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME:

N/A

(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): ° North

° West

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))		
If the applicant is a trust or a company, then complete with the trust or company information.		
NAME: NH Department of Transportation c/o Sam B. Newsom		
MAILING ADDRESS: PO Box 483; 7 Hazen Drive		
TOWN/CITY: Concord	STATE: NH	ZIP CODE: 03301
EMAIL ADDRESS: Sam.B.Newsom@dot.nh.gov		
FAX: [REDACTED]	PHONE: (603) 485-3806	
ELECTRONIC COMMUNICATION: By initialing here: SBN, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c))		
<input type="checkbox"/> N/A		
LAST NAME, FIRST NAME, M.I.: Walker, Peter, J.		
COMPANY NAME: VHB		
MAILING ADDRESS: 2 Bedford Farms Drive, Suite 200		
TOWN/CITY: Bedford	STATE: NH	ZIP CODE: 03110
EMAIL ADDRESS: pwalker@vhb.com		
FAX: [REDACTED]	PHONE: 603-391-3942	
ELECTRONIC COMMUNICATION: By initialing here PJW, I hereby authorize NHDES to communicate all matters relative to this application electronically.		
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b))		
If the owner is a trust or a company, then complete with the trust or company information.		
<input checked="" type="checkbox"/> Same as applicant		
NAME: [REDACTED]		
MAILING ADDRESS: [REDACTED]		
TOWN/CITY: [REDACTED]	STATE: [REDACTED]	ZIP CODE: [REDACTED]
EMAIL ADDRESS: [REDACTED]		
FAX: [REDACTED]	PHONE: [REDACTED]	
ELECTRONIC COMMUNICATION: By initialing here [REDACTED], I hereby authorize NHDES to communicate all matters relative to this application electronically.		

SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

All natural resources were delineated and classified by a NH Certified Wetlands Scientist in accordance with the criteria specified in Env-Wt 400. The project-specific criteria pertinent to public highways (Env-Wt 527) is detailed in the Application Narrative. Sections Env-Wt 600, Env-Wt 700, and Env-Wt 900 are not applicable to the proposed Project, as there are no tidal waters/wetlands, prime wetlands, or stream crossings.

SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#) and the [Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet](#). For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the [Avoidance and Minimization Checklist](#), the [Avoidance and Minimization Narrative](#), or your own avoidance and minimization narrative.

*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation [pre-application meeting](#) must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: 04 Day: 19 Year: 2023

N/A - Mitigation is not required

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: I confirm submittal.

N/A – Compensatory mitigation is not required

SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/ivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland	1,075		<input type="checkbox"/>			<input type="checkbox"/>
	Scrub-shrub Wetland	1,830		<input type="checkbox"/>			<input type="checkbox"/>
	Emergent Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Wet Meadow			<input type="checkbox"/>			<input type="checkbox"/>
	Vernal Pool			<input type="checkbox"/>			<input type="checkbox"/>
	Designated Prime Wetland			<input type="checkbox"/>			<input type="checkbox"/>
	Duly-established 100-foot Prime Wetland Buffer			<input type="checkbox"/>			<input type="checkbox"/>
Surface Water	Intermittent / Ephemeral Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Perennial Stream or River			<input type="checkbox"/>			<input type="checkbox"/>
	Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - River			<input type="checkbox"/>			<input type="checkbox"/>
Banks	Bank - Intermittent Stream			<input type="checkbox"/>			<input type="checkbox"/>
	Bank - Perennial Stream / River			<input type="checkbox"/>			<input type="checkbox"/>
	Bank / Shoreline - Lake / Pond			<input type="checkbox"/>			<input type="checkbox"/>
Tidal	Tidal Waters			<input type="checkbox"/>			<input type="checkbox"/>
	Tidal Marsh			<input type="checkbox"/>			<input type="checkbox"/>
	Sand Dune			<input type="checkbox"/>			<input type="checkbox"/>
	Undeveloped Tidal Buffer Zone (TBZ)			<input type="checkbox"/>			<input type="checkbox"/>
	Previously-developed TBZ			<input type="checkbox"/>			<input type="checkbox"/>
	Docking - Tidal Water			<input type="checkbox"/>			<input type="checkbox"/>
TOTAL		2,905					

SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)

MINIMUM IMPACT FEE: Flat fee of \$400.

NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION: Flat fee of \$400 (refer to RSA 482-A:3, 1(c) for restrictions).

MINOR OR MAJOR IMPACT FEE: Calculate using the table below:

Permanent and temporary (non-docking): SF × \$0.40 = \$

Seasonal docking structure: SF × \$2.00 = \$

Permanent docking structure: SF × \$4.00 = \$

Projects proposing shoreline structures (including docks) add \$400 = \$

Total = \$ 400

The application fee for minor or major impact is the above calculated total or \$400, whichever is greater = \$ 400

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SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)		
Indicate the project classification.		
<input checked="" type="checkbox"/> Minimum Impact Project	<input type="checkbox"/> Minor Project	<input type="checkbox"/> Major Project

SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)
--

Initial each box below to certify:	
Initials: [] [] []	To the best of the signer's knowledge and belief, all required notifications have been provided.
Initials: [] [] []	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.
Initials: [] [] []	<p>The signer understands that:</p> <ul style="list-style-type: none"> • The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: <ol style="list-style-type: none"> 1. Deny the application. 2. Revoke any approval that is granted based on the information. 3. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. • The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641. • The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.
Initials: [] [] []	If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)
--

SIGNATURE (OWNER): []	PRINT NAME LEGIBLY: Sam B. Newsom (NHDOT)	DATE: []
SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER): []	PRINT NAME LEGIBLY: []	DATE: []
SIGNATURE (AGENT, IF APPLICABLE): 	PRINT NAME LEGIBLY: Peter J. Walker (VHB)	DATE: 10/16/23

SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.	
TOWN/CITY CLERK SIGNATURE: []	PRINT NAME LEGIBLY: N/A per RSA 482-A:3(l)(a)(1).
TOWN/CITY: []	DATE: (Application filed with clerk at same time.)

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

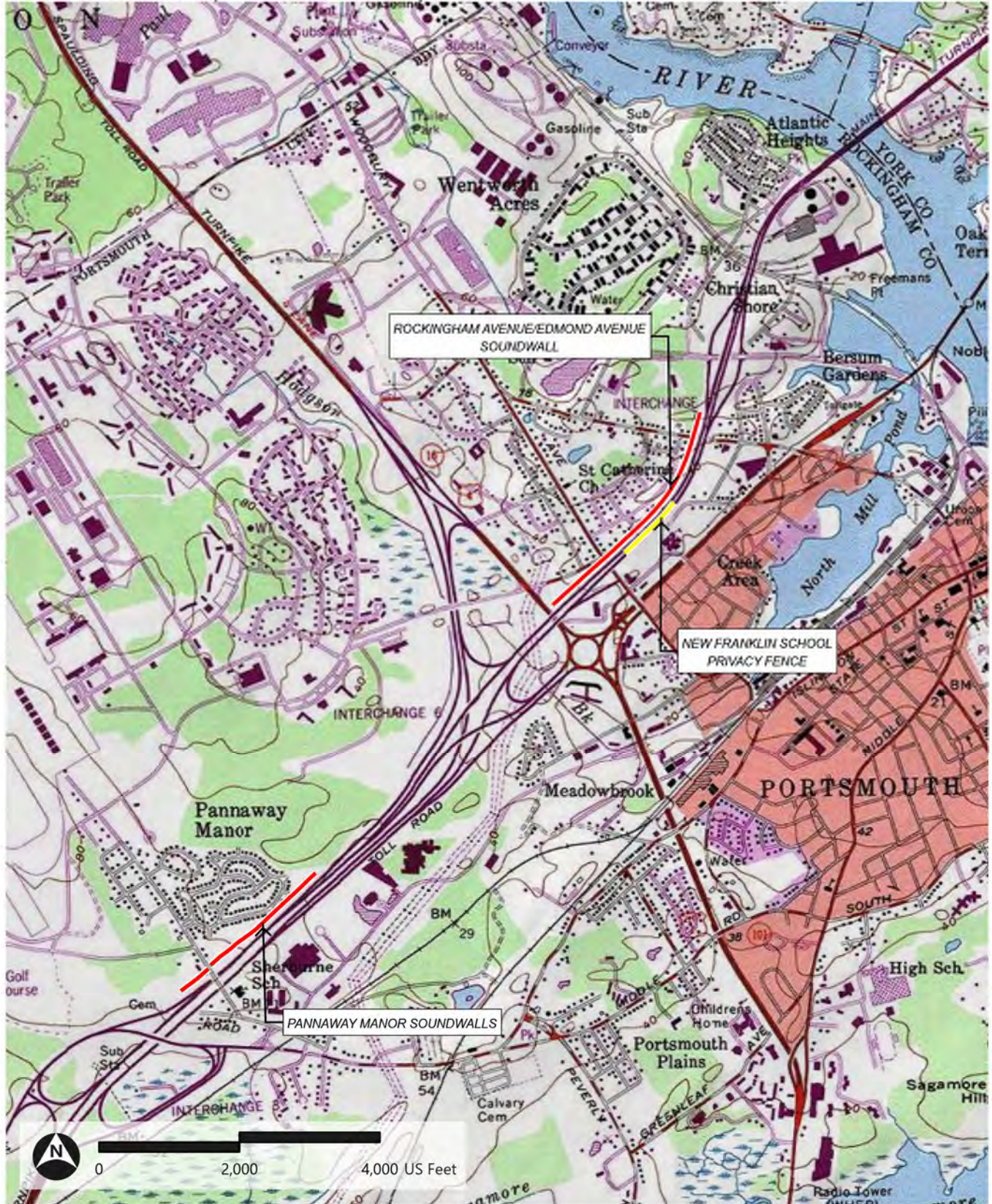
1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to "Treasurer – State of NH".

Figure 1: USGS Site Location Map

Portsmouth Soundwalls | Portsmouth, New Hampshire



- Proposed Soundwall
- Proposed Privacy Fence

Source: USGS

Path: \\vhb.com\gist\proj\Bedford\52709.03 Portsmouth Prel Design\Project\Portsmouth Soundwalls.aprx (franch; 11/21/2022)

Figure 2 - Aerial Map

Portsmouth Soundwalls | Portsmouth, New Hampshire



- ✂ Proposed Privacy Fence
- Parcel Boundary
- Proposed Soundwall

Source: NHDES, NHGRANT, Aerial: Nearmap 5/2/2022

Path: \\vhb.com\gta\proj\Bedford\S2709.03 Portsmouth Prel Design\Project\Portsmouth Soundwalls.aprx (User: ktrencb, Date: 12/16/2022)

Figure 2 - Aerial Map

Portsmouth Soundwalls | Portsmouth, New Hampshire



- Proposed Privacy Fence
- Parcel Boundary
- Proposed Soundwall

Path: \\vhb.com\g\proj\Bodford\S2709.03 Portsmouth Prel Design\Project\Portsmouth Soundwalls.aprx (User: krench, Date: 12/16/2022)

Source: NHDES, NHGRANT, Aerial: Nearmap 5/2/2022



AVOIDANCE AND MINIMIZATION CHECKLIST

Water Division/Land Resources Management Wetlands Bureau



[Check the Status of your Application](#)

RSA/Rule: RSA 482-A/ Env-Wt 311.07(c)

This checklist can be used in lieu of the written narrative required by Env-Wt 311.07(a) to demonstrate compliance with requirements for Avoidance and Minimization (A/M), pursuant to RSA 482-A:1 and Env-Wt 311.07(c).

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in [Attachment A: Minor and Major Projects \(NHDES-W-06-013\)](#)).

The following definitions and abbreviations apply to this worksheet:

- “A/M BMPs” stands for [Wetlands Best Management Practice Techniques for Avoidance and Minimization](#) dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- “Practicable” means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION		
APPLICANT LAST NAME, FIRST NAME, M.I.: NH Department of Transportation, c/o Newsom, Sam, B.		
PROJECT STREET ADDRESS: NHDOT-owned I-95 Right-of-Way (ROW)	PROJECT TOWN: Portsmouth	
TAX MAP/LOT NUMBER: N/A, NHDOT ROW		
SECTION 2 - PRIMARY PURPOSE OF THE PROJECT		
Env-Wt 311.07(b)(1)	Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>If you answered “no” to this question, describe the purpose of the “non-access” project type you have proposed:</p> <p>NHDOT proposes the construction of three soundwall sections and one privacy fence along Interstate 95 (I-95) in Portsmouth, New Hampshire to provide traffic noise mitigation related to the completed Portsmouth-York Hard Shoulder (PTSU) Project 16189B.</p>		

irm@des.nh.gov or (603) 271-2147

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SECTION 3 - A/M PROJECT DESIGN TECHNIQUES		
Check the appropriate boxes below in order to demonstrate that these items have been considered in the planning of the project. Use N/A (not applicable) for each technique that is not applicable to your project.		
Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	<input checked="" type="checkbox"/> Check <input type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A

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A/M BMPs	The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 500 Env-Wt 600 Env-Wt 900	Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 900	Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
A/M BMPs	Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
SECTION 4 - NON-TIDAL SHORELINE STRUCTURES		
Env-Wt 313.03(c)(1)	The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(2)	The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(3)	The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(4)	The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(5)	The non-tidal shoreline structure has been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A
Env-Wt 313.03(c)(6)	The non-tidal shoreline structure has been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.	<input type="checkbox"/> Check <input checked="" type="checkbox"/> N/A

Application Narrative

1. Introduction

On behalf of the New Hampshire Department of Transportation (NHDOT or "the Applicant"), this Wetlands Permit Application was prepared pursuant to the New Hampshire Revised Statutes Annotated (RSA) Chapter 482-A, Fill and Dredge in Wetlands, and Wetland Bureau Code of Administrative Rules, Chapters Env-Wt 100 through Env-Wt 900.

NHDOT proposes the construction of three soundwall sections and one privacy fence along Interstate 95 (I-95) in Portsmouth, New Hampshire ("the Project") to provide traffic noise mitigation related to the completed Portsmouth-York Hard Shoulder (PTSU) (NHDOT Project 16189B). Refer to **Section 3** of this **Application Narrative** below for more information. This work is entirely within the NHDOT right-of-way (ROW) as depicted in the appended plans. See the **USGS Site Location Map** and **Aerial Map** for the proposed location of the soundwalls and privacy fence.

Proposed Permit Description: *The NH Department of Transportation (NHDOT) proposes to permanently impact 2,905 square feet of palustrine wetlands to construct a soundwall within the Interstate 95 right-of-way to mitigate highway traffic noise within a residential neighborhood in Portsmouth, NH.*

2. Site Description and Existing Conditions

All work will be contained within the existing NHDOT-owned I-95 ROW. Portions of this ROW closest to the highway are routinely mowed, while the outer limits of the ROW consist of scrub-shrub and forested habitats. The primary land use abutting the proposed soundwall is residential property known as the Pannaway Manor neighborhood. Refer to the **Representative Site Photo Log** provided in **Appendix F**.

2.1 Natural Resource Desktop Review

The following information was obtained from the NHDES Wetlands Permit Planning Tool (WPPT) mapper.

ARM Funded Sites: There are no ARM funded sites within the vicinity of the proposed Project.

Conservation or Public Lands: There are no conservation or public lands within the vicinity of the Site.

Priority Resource Areas (PRAs): There are no mapped PRAs within or immediately adjacent to the Site. No prime wetlands, peatlands, floodplain wetlands, tidal wetlands, tidal waters, or documented occurrences of protected species or habitat will be impacted by the proposed Project.

Impairments: The Site is overlapped by the quarter mile buffer of surface waters with impairments (2020), as well as watersheds with chloride impairments (2020). However, the limited nature of the proposed work is not expected to contribute to any surface water impairments.

Other Water Types: There are no Class A waters or outstanding resource watersheds within the vicinity of the Site. Furthermore, there are no National Wild and Scenic Rivers within or near the Site.

Designated Rivers: There are no Designated River Corridors that intersect or abut the Site. Therefore, no coordination with a Local River Advisory Committee is required.

Floodplains and Floodways: There are no Federal Emergency Management Agency (FEMA) mapped floodplains or floodways within the vicinity of the Site. Refer to **Figure 3** provided in **Appendix H**.

Shoreland Jurisdiction: There are no watercourses or waterbodies subject to the Surface Water Quality Protection Act (SWQPA) within the vicinity of the Site. Therefore, no permitting through the NHDES Shoreland Program is required for this Project.

Wildlife Action Plan: The NH Fish & Game Department (NHF&G) has developed the New Hampshire Wildlife Action Plan (WAP) to assist with conserving and protecting wildlife species and habitat types throughout the State. Habitat tiers are separated into three rankings, which are 1) *Highest Ranked Habitat in the State*, 2) *Highest Ranked Habitat in Biological Region*, and 3) *Supporting Landscape*. There is no ranked habitat mapped within the vicinity of the Site. Refer to **Figure 4** provided in **Appendix H**. Habitat types within the vicinity of the Site include developed or barren land, developed impervious, and Appalachian-oak-pine. Refer to **Figure 5** provided in **Appendix H**.

2.2 Natural Resource Delineation

Wetland 1 (W-1) is comprised of a small, sparsely vegetated forested depression which contained leaf litter and standing water at the time of investigation. W-1 just barely intersects the limits of the NHDOT ROW and is classified as Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded (PFO1C). No vegetation was observed growing within the wetland depression. Hydric soil within this wetland met the Sandy Redox (S5) hydric soil indicator. Indicators of wetland hydrology include surface water (A1), saturation (A3), sparse vegetation (B8), and water-stained leaves (B9).

Wetland 2 (W-2) is primarily classified as Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PFO1E), but transitions to Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PSS1C) where it extends through the chain link fence, just east of the existing tree line.

Forested portion of W-2: red maple (*Acer rubrum*), soft rush (*Juncus effusus*), reed canary grass (*Phalaris arundinacea*), common horsetail (*Equisetum arvense*), sensitive fern (*Onoclea sensibilis*), path rush (*Juncus tenuis*), various unidentified grasses and sedges, wrinkleleaf goldenrod (*Solidago rugosa*), and a few green ash (*Fraxinus pennsylvanica*), along with the invasive glossy buckthorn (*Frangula alnus*), multiflora rose (*Rosa multiflora*), and burning bush (*Euonymus alatus*). Hydric soil within this wetland met the Depleted Matrix (F3) hydric soil indicator. Indicators of wetland hydrology include surface water (A1), saturation (A3), water-stained leaves (B9), and drainage patterns (B10).

Scrub-shrub portion of W-2: swamp dewberry (*Rubus hispidus*), soft rush, broadleaf meadowsweet (*Spiraea latifolia*), silky dogwood (*Cornus amomum*), white aster (*Symphotrichum* sp.), wrinkleleaf goldenrod, red maple samplings, some unidentified grasses and sedges, and a few quaking aspen, along with the invasive glossy buckthorn, multiflora rose, and oriental bittersweet (*Celastrus orbiculatus*). Hydric soil within this wetland met the Sandy Redox (S5), Depleted Matrix (F3), and Redox Dark Surface (F6) hydric soil indicators. Indicators of wetland hydrology include surface water (A1), saturation (A3), water-stained leaves (B9), drainage patterns (B10), and geomorphic position (D2).

See the **Environmental Field Work Technical Memorandum** provided in **Appendix I** for more information regarding the field work, including the delineated wetlands that will not be impacted, mapped invasives species, and drainage outfalls. No vernal pools are present within the vicinity of the Site. Note that in accordance with Env-Wt 311.01(b), functional assessments are only required for minor and major impact projects, not minimum impact projects. Therefore, no functional assessments have been prepared for this application.

2.3 Rare, Threatened, and Endangered Species

The following is a discussion of rare, threatened, and endangered species identified within the vicinity of the Site by the NH Natural Heritage Bureau (NHB) DataCheck tool and US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) system.

Natural Heritage Bureau

A search for the occurrence of rare plant, animal, or natural communities within the vicinity of the proposed Project was completed using the NHB online DataCheck tool. A report provided by NHB (NHB22-3853), dated December 20, 2022, indicated that although there was a NHB record present in the vicinity of the Site, that species is not expected to be impacted by the proposed work. Therefore, no coordination with NHB or the NH Fish and Game Department is required for this Project. Refer to the **NHB DataCheck Report** provided in **Appendix B**.

US Fish and Wildlife Service

The Project was reviewed for the presence of federally listed or proposed, threatened, or endangered species, designated critical habitat, or other natural resources concerning the USFWS IPaC System. Results dated August 29, 2023, indicated the potential presence of two species within the vicinity of the Site: northern long-eared bat (*Myotis septentrionalis*, "NLEB") and monarch butterfly (*Danaus plexippus*). Refer to the **USFWS IPaC Report** provided in **Appendix C**.

Northern Long-Eared Bat

The proposed Project is located within the federally protected range of the NLEB, which is a federally endangered species. Tree clearing activities are one of the largest threats to the NLEB. Based on the current plans, approximately 2.5 acres of woody vegetation/tree clearing are proposed and will occur within 100 feet of the existing road. Refer to **Figure 6** provided in **Appendix H**.

Consultation for the NLEB was completed using the *FHWA, FRA, FTA Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bats* Determination Key in IPaC and resulted in a *may affect – not likely to adversely affect* (NLAA) determination. This Project may rely on the concurrence provided in the amended February 5, 2018, *FHWA, FRA, FTA Programmatic Biological Opinion* (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and NLEB. Refer to the **Concurrence Verification Letter** provided in **Appendix C**.

Note that a Phase 2 Presence/Probable Absence Acoustic Monitoring Survey was conducted for this Project in the summer of 2023 in accordance with the *USFWS 2023 Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines*. That data is still undergoing review, but preliminary results have determined that NLEB is likely absent from the Site. If this preliminary determination is confirmed, the Section 7 consultation via the online IPaC determination key will be updated which should result in the removal of the avoidance and minimization measures currently listed on the appended letter. Note that the FHWA is the lead federal agency for this Project and NHDOT is authorized as their non-federal representative.

Monarch Butterfly

Since the monarch butterfly is a candidate species but is not listed as threatened or endangered, conservation measures are not required but should be implemented when feasible to demonstrate environmental stewardship. This species can be found anywhere where nectar producing plants are present, especially in open fields or meadows. Monarch butterflies will only breed in places with milkweed since that is the primary food source for their larva. Given the location of this Site within the I-95 right-of-way and lack of observed milkweed, suitable habitat for this species is considered absent from the Site. The candidate status of this species does not

provide protection under the Endangered Species Act, and no further coordination with the USFWS is required at this time.

3. Project Description, Impact Analysis, and Best Management Practices

3.1 Proposed Work

NHDOT proposes the construction of three soundwall sections and one privacy fence along Interstate 95 (I-95) in Portsmouth, New Hampshire (“the Project”) to provide traffic noise mitigation related to the completed Portsmouth-York Hard Shoulder (PTSU) Project 16189B. The PTSU Project will result in the part-time opening of roadway shoulders during heavy traffic from approximately Exit 5 in New Hampshire (Spaulding Turnpike/Portsmouth Traffic Circle interchange) to Exit 3 in Maine on I-95. While the New Hampshire portion of the project was determined not to require Federal Highway Administration (FHWA) oversight, for consistency, NHDOT still required that all applicable FHWA regulations, guidance, and policies related to noise be followed regardless of FHWA participation. The PTSU Project was determined to be classified within FHWA’s definition of a “Type I” project, thus warranting an evaluation of noise and consideration of potential noise abatement. A Traffic Noise Analysis conducted during development of the PTSU Project identified locations and measures for sound mitigation along the corridor.

All construction and associated laydown and access would occur within the I-95 NHDOT ROW or approved upland locations. Refer to the **Representative Site Photo Log** (provided in **Appendix F**) for photos of the subject areas.

Only one soundwall segment would require wetland impacts. The **Pannaway Manor** soundwall will be located adjacent to I-95 southbound (SB), between the Exit 3 interchange and Exit 5 interchange, abutting single-unit residential neighborhood. The proposed soundwall is to be approximately 2,500 linear feet with an average height of 21 feet and constructed from precast concrete. This soundwall will be comprised of two separate sections on either side of the Sherburne Road overpass bridge. There is a major gas line facility that will need to be avoided, as relocation of the gas line is not anticipated. Some woody vegetation and tree clearing/trimming will be required prior to construction of this soundwall. Construction is anticipated to begin in March of 2024, though construction will be limited from May 15 to October 15 to avoid conflict with seasonal part-time shoulder use as temporary barriers will be required for those portions of construction closer to the roadway.

Note that the effectiveness of the proposed soundwall depends on its length and height relative to the adjacent neighborhood. Although a shorter segment of soundwall would eliminate the wetland impact, this would compromise the effectiveness of the soundwall substantially, and would not meet the purpose and need for the project.

Refer to the **Construction Sequence Narrative** provided in **Appendix G** for additional project implementation details.

3.2 Impact Analysis

Jurisdictional impacts associated with this Project are limited to the northern end of the southern soundwall (Pannaway Manor). This project proposes a total of approximately 2,905 square feet (sq ft) of permanent palustrine wetland impacts; about 107 sq ft of permanent impact to Wetland 1 and about 2,798 sq ft of impact to Wetland 2. This permanent impact area was extended to the right-of-way boundary beyond the proposed

limits of permanent fill to allow for future maintenance of the soundwall. Therefore, no temporary wetland impacts are proposed. Refer to the **Wetland Impact Plans** provided as **Appendix J**.

3.3 Best Management Practices

Standard BMPs will be applied throughout construction in accordance with applicable NHDES and NHDOT BMP Manuals to reduce the risk of erosion and sediment-laden run-off from entering the surrounding habitat areas and adjacent wetlands. Perimeter controls such as silt fence and/or silt sock will be installed upslope of the wetlands and around the proposed limits of disturbance to ensure that surface water run-off from un-stabilized areas does not carry silt, sediment, and other debris outside of the limits of work. All installed temporary erosion control measures shall be inspected daily and repaired/replaced as necessary.

In accordance with the *New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction* dated December 2008, areas remaining un-stabilized for a period of more than 30 days shall be temporarily seeded and mulched. Erosion control blankets shall be installed on all slopes that are greater than 3 feet horizontal and 1 foot vertical (3:1). Upon the completion of the proposed work, all disturbed and graded areas located upslope of the erosion control measures will be seeded and mulched as needed. Disturbed areas that have been seeded and mulched will be considered stable once 85-percent vegetative growth has been achieved. Refer to the **Erosion Control Plans** provided as **Appendix K** for further details.

Since invasive plants are known to occur within the Site (both Type I and II), all work including daily removal of plant material from construction equipment, shall be constructed in accordance with NHDOT's *Best Management Practices for Roadside Invasive Plants Manual* (2008) and *Best Management Practices for the Control of Invasive and Noxious Plant Species* (2018). The Contractor will be required to provide an Invasive Species Management Plan specific to their means and methods of construction for review and approval by NHDOT. Only clean equipment that is free of plant material and debris shall be delivered to the Site and utilized during construction. All machinery entering and leaving any area containing invasive plants will be inspected for foreign plant matter (i.e., stems, flowers, and roots) and soil embedded in the tracks or wheels. If foreign plant matter or soil is present, the operator shall remove the plant material and soil from the machine using hand tools.

4. Cultural Resources

A Request for Project Review (RPR) was submitted to NH Division of Historical Resources (NHDHR) in early 2023 for the proposed Project. A response from NHDHR (dated February 6, 2023) stated that there were no archaeological concerns for the Project. However, they questioned potential visual impacts associated with the proposed tree clearing. Supplemental information was sent to NHDHR on May 5, 2023. A response from NHDHR (dated May 16, 2023) stated that they had no concerns regarding the proposed tree clearing, but requested additional coordination if concerns regarding the project were expressed by abutters. See the documentation provided in **Appendix D**.

5. Federal and Local Coordination

United States Army Corps of Engineers

The proposed Project includes approximately 2,905 sq ft of permanent impact to palustrine wetlands. These impacts fall under the US Army Corps of Engineers (USACE) Section 404 jurisdiction through the New Hampshire State Programmatic General Permit (GP) No. NAE-2022-00849. As such, Appendix B – Corps Secondary Impacts Checklist has been completed. Refer to the **ACOE Appendix B** checklist provided in **Appendix E**. Given the minimal proposed impacts (<3,000 sq ft), this project will likely qualify for self-verification under the GP.

Conservation Commission

In accordance with the procedure for submitting a Standard Dredge and Fill Wetlands Permit application to NHDES in RSA 482-A:3(l)(a)(1), the Portsmouth Conservation Commission will be provided a complete copy of this application concurrent with the NHDES submission. We will provide any comments received from the conservation commissions along with our responses to the NHDES Wetlands Bureau when we receive them, if applicable.

Natural Resource Agency Coordination Meeting (NRAM)

This Project was presented at the NRAM held on April 19, 2023. Refer to the **Meeting Minutes** provided in **Appendix A**.

6. Project-Specific Requirements (Env-Wt 500)

Since the Project involves the construction of soundwalls to mitigate increased highway noise, the standards outlined in New Hampshire Administrative Rule Env-Wt 527 are addressed below.

In accordance with RSA 482-A:3, I-a, this NHDOT project is subject to the rebuttable presumption that for applications "proposed, sponsored, or administered by the department of transportation", NHDOT "has exercised appropriate engineering judgement in the project's design."

6.1 Env-Wt 527.02: Approval Criteria for Public Highways

(a) The project meets the design criteria specified in Env-Wt 527.04;

Refer to the applicable discussion in Section 6.3 of this Application Narrative below.

(b) The project is consistent with RSA 482-A:1, RSA 483, RSA 483-B, RSA 485-A, and RSA 212-A;

The proposed Project is consistent with all above referenced statutes, as applicable. In accordance with RSA 482-A:1 "Finding of Public Purpose," the interests of the general public regarding preservation of natural resources are in line with the proposed activities; the proposed impacts have been avoided and minimized to the extent feasible while still accomplishing the Project objectives. No substantial adverse impacts to the functions and values of the palustrine wetlands are expected to result from the minimal nature of the proposed activities. RSA 483 "NH Rivers Management and Protection Program," and RSA 483-B "Shoreland Water Quality Protection Act" are both not applicable to the proposed project, as no watercourses will be impacted. Standard best management practices will be implemented to protect water quality, consistent with RSA 485-A. Finally, coordination with NHB was conducted to ensure all appropriate conservation measures are followed to avoid adverse impacts to protected species, thereby, complying with RSA 212-A "Endangered Species Conservation Act."

(c) The purpose of the project is to improve or maintain public safety, consistent with federal and state safety standards;

The purpose of this Project is to mitigate increased traffic noise to the surrounding sensitive receptors (i.e., residential properties and schools) in accordance with the applicable FHWA regulations, guidance, and policies related to noise. The proposed Project is the result of the 2021 Highway Noise Technical Report associated with the PTSU project, which identified mitigation measures for the part-time shoulder use. However, the PTSU project that necessitated this Project did improve public safety along I-95 by allowing part-time shoulder use during peak traffic flow periods to reduce congestion.

d) The project will not cause displacement of flood storage wetlands or cause diversion of stream flow impacting abutting landowner property; and

This Project will not cause displacement of flood storage or cause diversion of stream flows impacting abutting landowner property. No stream impacts are proposed, and minimal impacts (<3,000 sq ft) are proposed to palustrine wetlands within NHDOT-owned ROW. Furthermore, standard BMPs (i.e., silt fence or silt sock) will be implemented throughout construction as necessary based on site conditions.

(e) For a project in the 100-year floodplain, the project will not increase flood stages off-site.

Not applicable; this Project is not located within a 100-year floodplain.

6.2 Env-Wt 527.03: Application Requirements for Public Highway Projects

(a) A description of the scope of the project, the size of the impacts to aquatic resources, and the purpose of the project;

Please refer to the preceding sections of this Application Narrative.

(b) An accurate drawing with existing and proposed structure dimensions clearly annotated to:

- (1) Document existing site conditions;*
- (2) Detail the precise location of the project and show the impact of the proposed activity on jurisdictional areas;*
- (3) Show existing and proposed contours at 2-foot intervals;*
- (4) Show existing and proposed structure invert elevations on the plans; and*
- (5) Use a scale based on standard measures of whole units, such as an engineering rule of one to ten, provided that if plans are not printed at full scale, a secondary scale shall be noted on the plans that identifies the half scale unit of measurement;*

The project plans appended to this application meet these specifications.

(c) All easements and right-of-way acquisition area outlines in relation to the project;

The proposed work will occur within the limits of the existing NHDOT-owned I-95 ROW. The existing ROW lines are depicted on the Wetland Impact Plans provided in *Appendix J*.

(d) The name of the professional engineer who developed the plans, whether an employee of the applicant or at a consulting firm; and

Mr. Philip E. Kendall, HNTB, NH Professional Engineer #09174 is the engineer of record for this Project.

(e) An erosion control plan that shows:

- (1) Existing and proposed contours at 2-foot intervals, with existing contours shown with a lighter line weight and proposed contours shown with a heavier line weight such as a bold font; and*
- (2) The outermost limit of all work areas, including temporary phasing work, with perimeter controls.*

See the Erosion Control Plans provided in *Appendix K*.

6.3 Env-Wt 527.04: Design Requirements for Public Highway Projects

(a) Protect significant function wetlands, watercourses, and PRAs;

There are no significant function wetlands, watercourses, or PRAs within the vicinity of the Site.

(b) Minimize impacts to wetland and riparian function;

All proposed impacts have been minimized to the maximum extent practicable while still accomplishing the Project objectives (i.e., public safety); evident through the minimum impact classification of this Project.

Effectiveness of the proposed soundwall depends on its length and height relative to the adjacent neighborhood. Although a shorter segment of soundwall would eliminate the wetland impact, this would compromise the effectiveness of the soundwall substantially, and the project would no longer meet its purpose and need.

(c) *Maintain wetland and stream hydrology and function to the remaining aquatic resources;*

No adverse impact to the overall hydrology and function of the impacted wetlands is expected to result from the proposed activities. The proposed impacts are minimal and only comprise a small portion of the total area of each wetland. Wetlands 1 and 2 extend beyond the NHDOT ROW; therefore, most of each wetland will remain unimpacted by the proposed Project.

(d) *Use on-site measures to compensate for any loss of flood storage where the project proposes:*

(1) *Filling or placement of structures in a 100-year floodplain; or*

(2) *Greater than 0.5 acre-feet of fill volume or a road crossing that affects floodplain conveyance;*

Not applicable; this Project does not propose any work or fill within a floodplain.

(e) *Use on-site minimization and water quality protection measures to prevent direct discharge to surface waters and wetlands, including retention of vegetated filter strips between the construction area and the aquatic resource areas to disperse runoff with no direct discharge to natural wetlands or surface waters; and*

Perimeter controls such as silt fence and or silt sock will be installed upslope of the wetlands and around the proposed limits of disturbance to prevent surface water runoff from carrying silt, sediment, or other debris outside of the limits of work and into the surrounding habitat areas. Refer to Section 3.3 of this Application Narrative above for more information, as well as the Erosion Control Plans provided in *Appendix K*.

(f) *Where temporary impacts will occur, include re-establishment of a similar ecosystem using vegetative species and spacing that are as similar as practicable to what was removed unless the applicant shows that the proposed vegetative composition will provide higher functions and values.*

No temporary impacts are proposed for this Project.

6.4 Env-Wt 527.05: Construction Requirements for Public Highway Projects

(a) *The permit shall be contingent on review and approval by the department of final stream diversion and erosion control plans that detail the timing and method of stream flow diversion during construction and show temporary siltation, erosion, and turbidity control measures to be implemented; and*

As previously mentioned, temporary erosion controls (i.e., silt fence and/or silt sock) will be implemented throughout construction as necessary to protect the surrounding habitat areas. No stream impacts are proposed for this Project; therefore, no stream diversion plans are required. Refer to the Erosion Control Plans provided in *Appendix K*.

(b) *The contractor responsible for completion of the work shall use techniques described in Env-Wq 1504.06, Env-Wq 1504.16, Env-Wq 1505.02, Env-Wq 1506, and Env-Wq 1508.*

The contractor responsible for the completion of the proposed work will comply with the techniques described in Env-Wq 1504.06 "Plan Information," Env-Wq 1504.16 "Erosion Control Notes," Env-Wq 1505.02 "Required Construction Practices," Env-Wq 1506 "Methods for Erosion and Sediment Control During Terrain Alteration Activities," and Env-Wq 1508 "Permanent Methods for Protecting Water Quality," as applicable.

Appendix A – Natural Resource Agency Coordination Meeting Minutes

**BUREAU OF ENVIRONMENT
CONFERENCE REPORT**

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: April 19, 2023

LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT

Matt Urban
Andrew O’Sullivan
Josh Brown
Jon Evans
Mark Hemmerlein
Marc Laurin
Chris Carucci
Dillan Schmidt
Kirk Mudgett
Jason Ayotte
Meli Dube
Arin Mills
Kerry Ryan
Rhona Thompson

ACOE

Mike Hicks

USCG

Absent

EPA

Absent

NHDES

Karl Benedict
Mary Ann Tilton

NHB

Absent

NH Fish & Game

Mike Dionne
Kevin Newton

Federal Highway

Jamie Sikora

US Fish & Wildlife

Absent

The Nature Conservancy

Absent

**NH Transportation &
Wildlife Workgroup**

Absent

**Consultants/ Public
Participants**

Peter Walker
Nicole Martin
Frank Koczalka
Greg Goodrich
James Macpherson
Bob Landry
Dave Smith

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH: *(minutes on subsequent pages)*

Table of Contents

Finalize Meeting Minutes.....	2
Troy-Jaffrey, 43443 (X-A005(110)):	2
Wilton-Milford-Amherst-Bedford, 13692D (X-A004(698)):	9
Webster, 40810 (X-A005(217)):	10
Portsmouth, 43760 (X-A005(230)):	12

Portsmouth, 43760 (X-A005(230)):

Peter Walker (VHB) presented the proposed construction of three sections of soundwall and one privacy fence along I-95 in the City of Portsmouth. The southern Pannaway Manor Soundwall will consist of two separate sections of wall on either side of the Sherburne Road overpass bridge on the southbound side of I-95. The northern Rockingham Avenue/Edmund Avenue Soundwall is anticipated to be one continuous wall that would go over two overpass bridges (Woodbury Avenue and Maplewood Avenue) on the southbound side of I-95. These soundwalls will reduce highway noise generated from traffic along I 95 within the Pannaway Manor and Rockingham Avenue/Edmund Avenue neighborhoods. A Part Time Shoulder Use (PTSU) Project is anticipated to be completed in 2023 and will result in the part-time opening of roadway shoulders during heavy traffic from approximately Exit 5 in New Hampshire (Spaulding Turnpike/Portsmouth Traffic Circle interchange) to Exit 3 in Maine on I-95. This project required assessment of noise along the corridor as it was classified as a Type I improvement per the NHDOT Highway Traffic Noise Policy (November 2016). Additionally, a privacy fence is proposed between the highway and New Franklin School on the northbound side of I-95 to replace the existing wooden plank fence. All work will be contained within the limits of the NHDOT right-of-way (ROW).

The northern end of the northern segment of the Pannaway Manor soundwall would impact palustrine wetlands (<3,000 square feet), necessitating a Minimum Impact Standard Dredge and Fill Wetlands Permit Application. Some tree clearing is proposed within the ROW. A NEPA Categorical Exclusion is currently being prepared for this project. The NHB DataCheck Report stated that although there was a NHB record present in the vicinity, no impacts are expected; consequently, no consultation with NHB or NHF&G is required for this project. The USFWS IPaC Report identified the northern long-eared bat (NLEB) and monarch butterfly. Consultation for the NLEB was completed using the FHWA Determination Key in IPaC which resulted in a not likely to adversely affect (NLAA) determination. Since the monarch butterfly is a candidate species, no consultation is required.

A Section 106 consultation is in progress. A Request for Project Review (RPR) was sent to NHDHR. NHDHR responded in February 2023 that they have no archeological concerns, however, potential visual impacts associated with the proposed tree clearing are still under review. Finally, there is ongoing coordination with NHDES on requirements to address potential interaction with PFAS intercepted in groundwater.

Comments and Questions:

Karl Benedict (NHDES) requested that consideration of invasive species (which VHB mapped), vernal pools, and look further into the potential PFAS impacts as there are known PFAS groundwater impacts in proximity to the area. Peter confirmed that no vernal pools were identified during the natural resource delineation field work. Peter also confirmed that VHB was aware of invasive species within the project area and will address them.

Mary Ann Tilton (NHDES) stated that since the project proposes such minimal impacts, she had no concerns.

Mike Dionne (NHF&G) inquired about what the NHB record was on the DataCheck Report. Nicole and Pete clarified that the report did not disclose the record but said that no impacts are expected to result from the proposed project.

Kevin Newton (NHF&G) had no comment.

Mike Hicks (USACE) had no comment.

Jamie Sikora (FHWA) said that hopefully people are coordinating with FHWA for the proposed shoulder use and emergency pull offs. Jon Evans (NHDOT) indicated that Maine DOT is leading the PTSU and coordinating with their FHWA office on such.

Appendix B – NHB DataCheck Report

New Hampshire Natural Heritage Bureau

NHB DataCheck Results Letter

To: Nicole Martin, VHB, Inc.
2 Bedford Farms Drive
Suite 200
Bedford, NH 03110

From: NH Natural Heritage Bureau

Date: 12/20/2022 (valid until 12/20/2023)

Re: Review by NH Natural Heritage Bureau of request submitted 12/13/2022

Permits: NHDES - Wetland Standard Dredge & Fill - Minor, USACE - General Permit,
USCEQ - Federal: NEPA Review

NHB ID: NHB22-3853

Applicant: NH Department of
Transportation c/o Jon
Evans

Location: Portsmouth
Roadway Rights-of-Way

Project

Description: NHDOT proposes to construct two sound walls (>20 feet tall precast concrete barriers) that abut residential neighborhoods to mitigate higher noise levels due to increased traffic volumes, along with a privacy fence near the New Franklin School (as this area did not meet the feasibility requirements for a sound wall). All construction and associated laydown and access will occur within the I-95 NHDOT-owned right-of-way (ROW) with some access and staging to occur from the existing I-95 road shoulder. Some tree clearing in the ROW will be required. There also may be some limited impacts to forested wetlands located along the outer edge of the proposed limits of disturbance at the northern end of the southern sound wall. Wildlife friendly erosion controls will be used throughout construction.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed

New Hampshire Natural Heritage Bureau
NHB DataCheck Results Letter

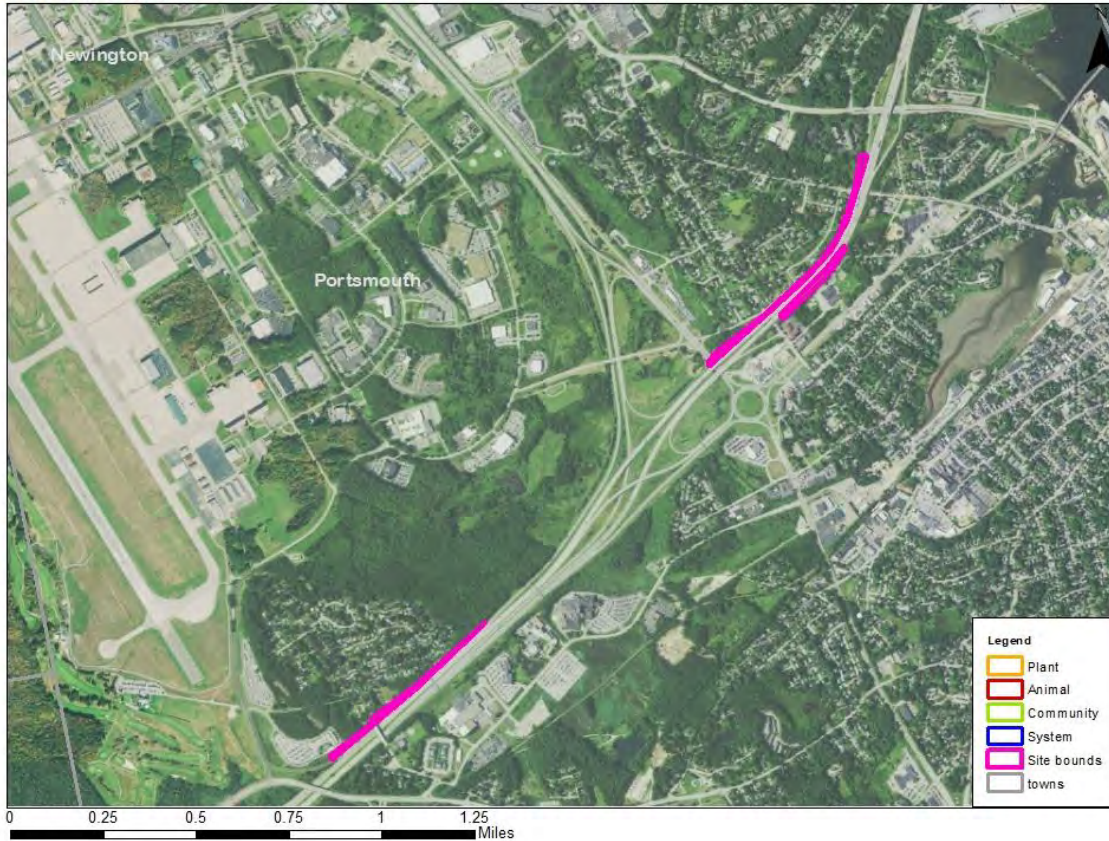
project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 12/13/2022 4:19:48 PM, and cannot be used for any other project.

Based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

MAP OF PROJECT BOUNDARIES FOR: **NHB22-3853**

NHB22-3853



Appendix C – USFWS IPaC Report and Correspondence



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:

August 29, 2023

Project Code: 2023-0024922

Project Name: Portsmouth Soundwalls along I-95 (NHDOT #43760, FHWA #X-A005(230))

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the “**New England Field Office Endangered Species Project Review and Consultation**” website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

<https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review>

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/service/section-7-consultations>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

<https://www.fws.gov/program/migratory-bird-permit>

<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

PROJECT SUMMARY

Project Code: 2023-0024922

Project Name: Portsmouth Soundwalls along I-95 (NHDOT #43760, FHWA #X-A005(230))

Project Type: Road/Hwy - Maintenance/Modification

Project Description: NHDOT proposes to construct two sound walls (>20 feet tall precast concrete barriers) that abut residential neighborhoods to mitigate higher noise levels due to increased traffic volumes, along with a privacy fence near the New Franklin School (as this area did not meet the feasibility requirements for a sound wall). All construction and associated laydown and access will occur within the I-95 NHDOT-owned right-of-way (ROW) with some access and staging to occur from the existing I-95 road shoulder. Some tree clearing in the ROW will be required. There also may be some limited impacts to forested wetlands located along the outer edge of the proposed limits of disturbance at the northern end of the southern sound wall. Wildlife friendly erosion controls will be used throughout construction.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.07762255,-70.77725390017841,14z>



Counties: Rockingham County, New Hampshire

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: VHB, Inc.
Name: Nicole Martin
Address: 2 Bedford Farms Drive
Address Line 2: Suite 200
City: Bedford
State: NH
Zip: 03110
Email: nmartin@vhb.com
Phone: 6033913900

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:

April 13, 2023

Project code: 2023-0024922

Project Name: Portsmouth Soundwalls along I-95 (NHDOT #43760, FHWA #X-A005(230))

Subject: Concurrence verification letter for the 'Portsmouth Soundwalls along I-95 (NHDOT #43760, FHWA #X-A005(230))' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated April 13, 2023 to verify that the **Portsmouth Soundwalls along I-95 (NHDOT #43760, FHWA #X-A005(230))** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
-

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

Portsmouth Soundwalls along I-95 (NHDOT #43760, FHWA #X-A005(230))

DESCRIPTION

NHDOT proposes to construct two sound walls (>20 feet tall precast concrete barriers) that abut residential neighborhoods to mitigate higher noise levels due to increased traffic volumes, along with a privacy fence near the New Franklin School (as this area did not meet the feasibility requirements for a sound wall). All construction and associated laydown and access will occur within the I-95 NHDOT-owned right-of-way (ROW) with some access and staging to occur from the existing I-95 road shoulder. Some tree clearing in the ROW will be required. There also may be some limited impacts to forested wetlands located along the outer edge of the proposed limits of disturbance at the northern end of the southern sound wall. Wildlife friendly erosion controls will be used throughout construction.

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

No

2. Is the project within the range of the northern long-eared bat^[1]?

[1] See [northern long-eared bat species profile](#)

Automatically answered

Yes

3. Which Federal Agency is the lead for the action?

A) *Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

Yes

9. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

12. Does the project include activities **within documented NLEB habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry triangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

B) During the inactive season

15. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

16. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

17. Are *all* trees that are being removed clearly demarcated?

Yes

18. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

No

19. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

No

20. Does the project include slash pile burning?

No

21. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

Yes

22. Is there *any* suitable habitat^[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's current [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

23. Has a bridge assessment^[1] been conducted **within** the last 24 months^[2] to determine if the bridge is being used by bats?

[1] See [User Guide Appendix D](#) for bridge/structure assessment guidance

[2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

Yes

SUBMITTED DOCUMENTS

- *Portsmouth 43760_Bat Assessment Form_Woodbury Ave Bridge_Signed_final.pdf*
<https://ipac.ecosphere.fws.gov/project/MAUOAR7T2RBHHIWQHGA637TZPE/projectDocuments/124992815>
- *Portsmouth 43760_Bat Assessment Form_Maplewood Ave Bridge_Signed_final.pdf*
<https://ipac.ecosphere.fws.gov/project/MAUOAR7T2RBHHIWQHGA637TZPE/projectDocuments/124992816>

24. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)^[1]?

[1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

No

25. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

No

26. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

27. Will the project involve the use of **temporary** lighting *during* the active season?

Yes

28. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

Yes

29. Will the project install new or replace existing **permanent** lighting?

No

30. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?

Yes

31. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

32. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

Yes

33. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

34. Will the project raise the road profile **above the tree canopy**?

No

35. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.

36. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

Automatically answered

Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season

37. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

38. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

Automatically answered

Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

39. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

40. **Tree Removal AMM 1**

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word "trees" as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS' current summer survey guidance for our latest definitions of suitable habitat.

Yes

41. **Tree Removal AMM 3**

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

42. **Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

43. **Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

N/A

3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

2.5

4. Please describe the proposed bridge work:

Installing precast concrete soundwalls along two overpass bridges.

5. Please state the timing of all proposed bridge work:

Construction is anticipated to commence in March 2024.

6. Please enter the date of the bridge assessment:

08/30/2022

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on April 03, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: New Hampshire Department of Transportation
Name: Jonathan Evans
Address: 7 Hazen Drive
Address Line 2: PO Box 483
City: Concord
State: NH
Zip: 03302
Email: jonathan.a.evans@dot.nh.gov
Phone: 6032714048

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Appendix D – NHDHR Section 106 Consultation

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

Project Boundaries and Description

- Attach the Project Mapping *indicating the proposed area of potential effects (APE)*. (See RPR for Transportation Projects Instructions and R&C FAQs for guidance. Note that the APE is subject to approval by lead federal agency and SHPO.)
- Attach a detailed narrative description of the proposed project.
- Attach current engineering plans with tax parcel, landscape, and building references, and areas of proposed excavation, if available.
- Attach photos of the project area/APE with mapped photo key (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Blank photo logs are available on the DHR website. Informative photo captions can be used in place of a photo log.)
- A DHR records search must be conducted to identify properties within or adjacent to the APE. Provide records search results via EMMIT or in **Table 1**. (Blank table forms are available on the DHR website.) EMMIT or in-house records search conducted on 11/09/2022.*

**The DHR recommends that all survey/National Register nomination forms and their Determination of Eligibility (green) sheets are downloaded or copied for your use in project development.*

Architecture

Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the APE? Yes No

If no, skip to Archaeology section. If yes, submit all of the following information:

- Attach completed **Table 2**.
- Photographs of *each* resource or streetscape located within the APE. Add to the mapped photo key and photo log noted above. (Digital photographs are accepted. All photographs must be clear, crisp and focused.)
- Copies of National Register boundary (listed or eligible) mapping, and add National Register boundaries for listed and eligible properties to project mapping/engineering plans (if applicable).

Archaeology

Does the proposed undertaking involve ground-disturbing activity? Yes No

If yes, submit all of the following information:

- Description of current and previous land use and disturbances.
- Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)

Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.

AGENCY COMMENT

This Space for DOT and Division of Historical Resources Use Only

Sent to DHR; Authorized DOT Signature:  Date: 1/12/2023

- Insufficient information to initiate review.
- Additional information is needed in order to complete review.

Comments: NO ARCHAEOLOGICAL CONCERNS.

Will trees be left/reintroduced to soften the starkness of the concrete walls?
Survey may be recommended depending on the usual impact to adjacent homes / neighborhood.

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized DHR Signature:  Date: Feb 6, 2023

Please mail 2 copies of the completed form and required material to:

Cultural Resources Staff
Bureau of Environment
NH Department of Transportation
7 Hazen Drive
Concord, NH 03302

RECEIVED MAY 04 2023

DHR Use Only
R&C# 14605M1
Log In Date 5.4.23
Response Date ___/___/___
Sent Date ___/___/___

**Request for Project Review by the
New Hampshire Division of Historical Resources
for Transportation Projects**

RECEIVED
MAY 22 2023

vhb

- This is a new submittal.
- This is additional information relating to DHR Review and Compliance (R&C)#: 14605

GENERAL PROJECT INFORMATION
DOT Project Name & Number Portsmouth 43760
Brief Descriptive Project Title Soundwall Along I-95 in Portsmouth
Project Location I-95
City/Town Portsmouth
Lead Federal Agency and Contact (if applicable) Federal Highway Administration (Agency providing funds, licenses, or permits) Permit Type and Permit or Job Reference # X-A005(230)
DOT Environmental Manager (if applicable) Jon Evans
PROJECT SPONSOR INFORMATION
Project Sponsor Name NH Department of Transportation
Mailing Address PO Box 483 Phone Number (603) 271-4048
City Concord State NH Zip 03302 Email Jonathan.A.Evans@dot.nh.gov
CONTACT PERSON TO RECEIVE RESPONSE
Name/Company Sarah Graulty / VHB
Mailing Address 2 Bedford Farms Drive, Suite 200 Phone Number 6176072669
City Bedford State NH Zip 03110 Email sgraulty@vhb.com

This form is updated periodically. Please download the current form at <http://www.nh.gov/nhdhr/review>. Please refer to the Request for Project Review for Transportation Projects Instructions for direction on completing this form. Submit 2 copies of this project review form for each project for which review is requested. Include 1 self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DOT and the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: <http://www.nh.gov/nhdhr/review> or contact the R&C Specialist at marika.s.labash@dncr.nh.gov or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

Project Boundaries and Description

- Attach the Project Mapping indicating the proposed area of potential effects (APE).
Attach a detailed narrative description of the proposed project.
Attach current engineering plans with tax parcel, landscape, and building references, and areas of proposed excavation, if available.
Attach photos of the project area/APE with mapped photo key (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.)
A DHR records search must be conducted to identify properties within or adjacent to the APE.

*The DHR recommends that all survey/National Register nomination forms and their Determination of Eligibility (green) sheets are downloaded or copied for your use in project development.

Architecture

Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the APE? Yes No

If no, skip to Archaeology section. If yes, submit all of the following information:

- Attach completed Table 2.
Photographs of each resource or streetscape located within the APE. Add to the mapped photo key and photo log noted above.
Copies of National Register boundary (listed or eligible) mapping, and add National Register boundaries for listed and eligible properties to project mapping/engineering plans (if applicable).

Archaeology

Does the proposed undertaking involve ground-disturbing activity? Yes No

If yes, submit all of the following information:

- Description of current and previous land use and disturbances.
Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)

Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.

AGENCY COMMENT

This Space for DOT and Division of Historical Resources Use Only

Sent to DHR; Authorized DOT Signature: Date:

- Insufficient information to initiate review.
Additional information is needed in order to complete review.

Comments: Thank you for the detail regarding tree cleanups. If property owners have concerns, please contact DHR.

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized DHR Signature: Laura Black Date: May 16, 2023

Appendix E – ACOE Appendix B



**US Army Corps
of Engineers**®
New England District

**Appendix B
New Hampshire General Permits
Required Information and USACE Section 404 Checklist**

USACE Section 404 Checklist

1. Attach any explanations to this checklist. Lack of information could delay a USACE permit determination.
2. All references to “work” include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See GC 3 for information on single and complete projects.
4. Contact USACE at (978) 318-8832 with any questions.
5. The information requested below is generally required in the NHDES Wetland Application. See page 61 for NHDES references and Admin Rules as they relate to the information below.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See the following to determine if there is an impaired water in the vicinity of your work area. * https://nhdes-surface-water-quality-assessment-site-nhdes.hub.arcgis.com/ https://www.des.nh.gov/water/rivers-and-lakes/water-quality-assessment https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx	X	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to tidal SAS, prime wetlands, or priority resource areas? Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at https://www4.des.state.nh.us/NHB-DataCheck/ .		X
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?		N/A
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		N/A
2.5 The overall project site is more than 40 acres?		N/A
2.6 What is the area of the previously filled wetlands?	Unknown	
2.7 What is the area of the proposed fill in wetlands?	2,905 SF	
2.8 What % of the overall project sire will be previously and proposed filled wetlands?	Unknown	
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: https://www4.des.state.nh.us/NHB-DataCheck/ . USFWS IPAC website: https://ipac.ecosphere.fws.gov/		X

3.2 Would work occur in any area identified as either “Highest Ranked Habitat in N.H.” or “Highest Ranked Habitat in Ecological Region”? (These areas are colored magenta and green, respectively, on NH Fish and Game’s map, “2010 Highest Ranked Wildlife Habitat by Ecological Condition.”) Map information can be found at: <ul style="list-style-type: none"> • PDF: https://wildlife.state.nh.us/wildlife/wap-high-rank.html. • Data Mapper: www.granit.unh.edu. • GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html. 		X
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		X
3.5 Are stream crossings designed in accordance with the GC 31?		N/A
4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		X
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		N/A
5. Historic/Archaeological Resources		
For a minimum, minor or major impact project - a copy of the RPR Form (www.nh.gov/nhdhr/review) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 37 GC 14(d) of the GP document**	X	
6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact)	Yes	No
Projects with greater than 1 acre of permanent impact must include the following: <ul style="list-style-type: none"> • Functional assessment for aquatic resources in the project area. • On and off-site alternative analysis. • Provide additional information and description for how the below criteria are met. 		N/A
6.1 Will there be complete loss of aquatic resources on site?		
6.2 Have the impacts to the aquatic resources been avoided and minimized to the greatest extent practicable?		
6.3 Will all aquatic resource function be lost?		
6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)?		
6.5 Is there an on-site alternative with less impact?		
6.6 Is there an off-site alternative with less impact?		
6.7 Will there be a loss to a resource dependent species?		
6.8 Are indirect impacts greater than 1 acre within and adjacent to the project area?		
6.9 Does the proposed mitigation replace aquatic resource function for direct, indirect, and cumulative impacts?		

*Although this checklist utilizes state information, its submittal to USACE is a federal requirement.

** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.

1.1 The Site is overlapped by the quarter mile buffer of surface waters with impairments (2020), as well as watersheds with chloride impairments (2020). However, the limited nature of the proposed work is not expected to contribute to any surface water impairments. Erosion controls will be utilized throughout construction as necessary.

2.1-2.4 There are two delineated intermittent streams within 200 feet of the proposed northern soundwall (Rockingham Avenue/Edmond Avenue); however, these streams are not proposed to be impacted and erosion controls will be used between the streams and the proposed work during construction. There are no priority resource areas within the vicinity of the Site and no wetland crossings or riparian buffer removal are proposed. Minimal (<3,000 sq ft) permanent impacts due to fill are proposed within palustrine wetlands to construct the northern section of the southern soundwall (Pannaway Manor).

2.5-2.8 The Site consists of the proposed limits of work around each soundwall and privacy fence that will be contained within the existing NH Department of Transportation (NHDOT)-owned Interstate 95 (I-95) right-of-way (ROW). The proposed permanent palustrine wetland impacts total approximately 2,905 sq ft. No temporary impacts are proposed.

3.1 The NHB DataCheck Report (NHB22-3853) indicated that although there was a NHB record present in the vicinity of the Site, that species is not expected to be impacted by the proposed work. Therefore, no coordination with NHB or NHF&G is required for this Project. The USFWS IPaC report identified the endangered northern long-eared bat (NLEB) and candidate species monarch butterfly. Consultation for the NLEB resulted in a "not likely to adversely affect" determination obtained via the online FHWA Determination Key in IPaC on April 13, 2023. Furthermore, a recently completed Phase 2 Presence/Probable Absence Acoustic Monitoring Survey for this Project resulted in a probable absence determination for the NLEB. The corresponding IPaC consultation will soon be updated to reflect this. Refer to **Section 2.3** of the **Application Narrative** for a more detailed discussion.

3.2 There is no ranked habitat mapped within the vicinity of the Site. Refer to **Section 2.1** of the **Application Narrative** for more information. Therefore, this Project is not expected to adversely impact areas of ranked wildlife habitat.

4.1 There are no Federal Emergency Management Agency (FEMA) mapped floodplains or floodways within the vicinity of the Site.

5.0 A Request for Project Review (RPR) was submitted to the NH Division of Historical Resources (NHDHR), and the corresponding consultation with NHDHR is complete (which resulted in them having no concerns regarding the proposed tree clearing and potential visual impacts of the soundwalls). Refer to **Section 4** of the **Application Narrative** for more details regarding the Section 106 consultation for this Project.

Appendix F – Representative Site Photo Log

Representative Site Photo Log
I-95 Soundwalls, Portsmouth, NH – 11/29/2022



Photo 1: View northeast toward Sherburne Road of the western end of the proposed Pannaway Manor Soundwall Area. Note the Sherburne Road overpass bridge in the background.



Photo 2: View southwest of the eastern end of the proposed Pannaway Manor Soundwall Area along the edge of Wetland 2. Note the Sherburne Road overpass bridge in the background.

Representative Site Photo Log
I-95 Soundwalls, Portsmouth, NH – 11/29/2022



Photo 3: View southeast of Wetland 1 towards I-95 (in the background).



Photo 4: Representative view north of the center of Wetland 2.

Representative Site Photo Log
I-95 Soundwalls, Portsmouth, NH – 11/29/2022



Photo 5: View northeast of the Woodbury Avenue (206/122) bridge near the proposed Rockingham Avenue/ Edmond Avenue Soundwall Area.



Photo 6: View northeast toward the proposed Rockingham Avenue/ Edmond Avenue Soundwall Area.

Representative Site Photo Log
I-95 Soundwalls, Portsmouth, NH – 11/29/2022



Photo 7: View northeast of the existing wooden fence near the New Franklin School.



Photo 8: View southwest of the existing wooden fence near the New Franklin School.

Appendix G – Construction Sequence Narrative

SDR PROCESSED	DATE	DATE	DATE	DATE	DATE	DATE
	NEW DESIGN	HNTB DESIGN TEAM	DATE	5/10/2023	DATE	5/10/2023
	SHEET CHECKED	P. KENDALL & D. SMITH	DATE	5/10/2023	DATE	
	AS BUILT DETAILS		DATE		DATE	

REVISIONS AFTER PROPOSAL	NUMBER	DATE	STATION	STATION	DESCRIPTION

GENERAL TRAFFIC CONTROL NOTES

(APPLICABLE TO ALL TRAFFIC CONTROL PLANS):

- REFER TO NHDOT CONTROL STANDARD PLANS FOR TYPICAL SIGN LAYOUTS. SIGNS SHALL NOT BLOCK OTHER ROADWAY SIGNS. REFER TO MUTCD FOR CONDITIONS NOT ADDRESSED BY THE STANDARD PLANS.
- ALL TEMPORARY TRAFFIC LANES SHALL BE A MINIMUM OF 12 FEET UNLESS OTHERWISE NOTED. PLACE ALL TEMPORARY PAVEMENT MARKINGS, SYMBOLS AND WORDS IN ACCORDANCE WITH NHDOT STANDARD PLANS, STANDARD NOW, PM-1 THROUGH PM-14.
- IMPACT ATTENUATORS (ITEM 606.9523) AND START OF PORTABLE CONCRETE BARRIER (ITEM 606.417) MUST BE ILLUMINATED AT ALL TIMES.
- THE CONTRACTOR SHALL LIMIT THE AREA OF DISTURBANCE COMMENSURATE WITH THE CONTRACTOR'S CAPABILITIES AND PROGRESS IN KEEPING GRADING, MULCHING, SEEDING AND UTILIZING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES CONCURRENT WITH OPERATIONS. EARTHWORK STOCKPILES ARE TO BE SEEDED AND MULCHED AND HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.
- EXISTING SIGNS IN CONFLICT WITH TRAFFIC CONTROL SHALL BE COVERED.
- EXISTING LIGHTING SHALL BE USED WHEN APPLICABLE DURING CONSTRUCTION PHASING.
- EXISTING SPEED LIMIT WILL BE MAINTAINED.
- NORTH AND SOUTH SOUNDWALL AND PRIVACY FENCE CONSTRUCTION MAY OCCUR CONCURRENTLY.

SOUTH SOUNDWALL TRAFFIC CONTROL NOTES

- SOUNDWALL CONSTRUCTION BEHIND EXISTING GUARDRAIL DOES NOT REQUIRED THE USE OF TEMPORARY CONCRETE BARRIER.
- THE LOCATION OF THE EXISTING GAS LINE SHOWN ON THE PLANS IS APPROXIMATE. MINOR GRADING IS ANTICIPATED NEAR THE GAS LINE. HOWEVER THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING NEAR THE GAS LINE.

SOUTH SOUNDWALL CONSTRUCTION

- CLEAR TREES.
- CONSTRUCT SOUNDWALL BERM.
- INSTALL DRAINAGE ASSOCIATED WITH DRAINAGE NOTES: 1, 2, 3, 4, 5, & 6.
- REMOVE DRAINAGE ASSOCIATED WITH DRAINAGE NOTE: R1, R2, & R3.
- INSTALL DRILLED SHAFTS AND ERECT SOUNDWALL.

NORTH SOUNDWALL TRAFFIC CONTROL NOTES

- CONSTRUCTION ACTIVITIES SUCH AS CLEARING, PLACEMENT OF EMBANKMENT, AND RETAINING WALL CONSTRUCTION SHALL OCCUR BEHIND THE EXISTING GUARDRAIL BEFORE TEMPORARY BARRIER IS PLACED AND THERE SHALL BE NO IMPACT TO THE PART TIME SHOULDER LANE DURING THESE ACTIVITIES.

NORTH SOUNDWALL CONSTRUCTION

- CLEAR TREES.
- INSTALL PROPOSED UNDERDRAIN IN ACCORDANCE WITH DRAINAGE NOTES: U1, U2, U3, U4, U5, U6, U7, U8, U9, U 10, & U11.
- CONSTRUCT RETAINING WALL.
- CONSTRUCT SOUNDWALL BERM.
- INSTALL DRILLED SHAFTS AND ERECT SOUNDWALL.
- REMOVE EXISTING GUARDRAIL. INSTALL BARRIER, AND CONNECT TO EXISTING GUARDRAIL AS SHOWN IN THE PLANS.

PRIVACY FENCE TRAFFIC CONTROL NOTES

- WORK TO CONSTRUCT THE PRIVACY FENCE IS EXPECTED TO OCCUR BEHIND THE EXISTING GUARDRAIL WITH NO IMPACTS TO TRAFFIC.

PRIVACY FENCE CONSTRUCTION

- CLEAR TREES.
- REMOVE EXISTING FENCE.
- CONSTRUCT EMBANKMENT.
- INSTALL NEW PRIVACY FENCE.

PRELIMINARY PLANS
SUBJECT TO CHANGE
DATE 5/10/2023



STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF TURNPIKES			
<i>TRAFFIC CONTROL NARRATIVE</i>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
43760-TRF_PNT	43760	1	1

Appendix H – Project Mapping

Figure 3 - FEMA Floodplain and Water Resources Map

Portsmouth Soundwalls | Portsmouth, New Hampshire



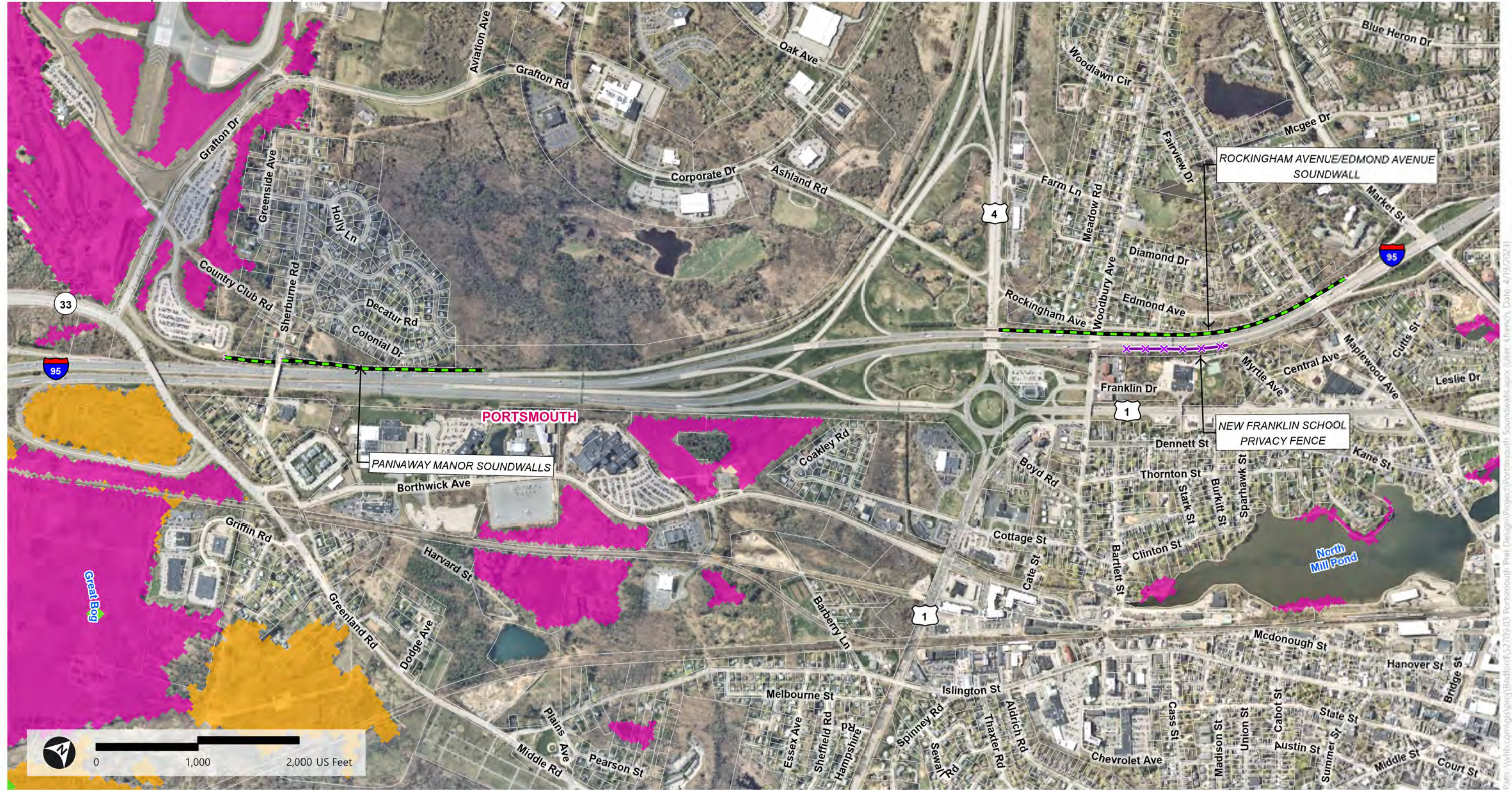
- ✂ Proposed Privacy Fence
- ▬ Proposed Soundwall
- Base Flood Elevations
- Flood Hazard - Areas**
- 1% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard
- ▬ Delineated Wetland Edge
- Field Delineated Wetland
- NWI Inventory
- ▭ Town Boundary
- ▭ Parcel Boundary

Source: NHGRANT, NHDES, FEMA, Aerial: Nearmap 5/2/2022

Path: \\vhb.com\gis\proj\Bedford\52709_03_Portsmouth_Prel_Design\Project\Portsmouth_Soundwalls.aprx (User: ktrincay, Date: 12/16/2022)

Figure 4: NHF&G Wildlife Action Plan Ranked Habitat Map

Portsmouth Soundwalls | Portsmouth, New Hampshire

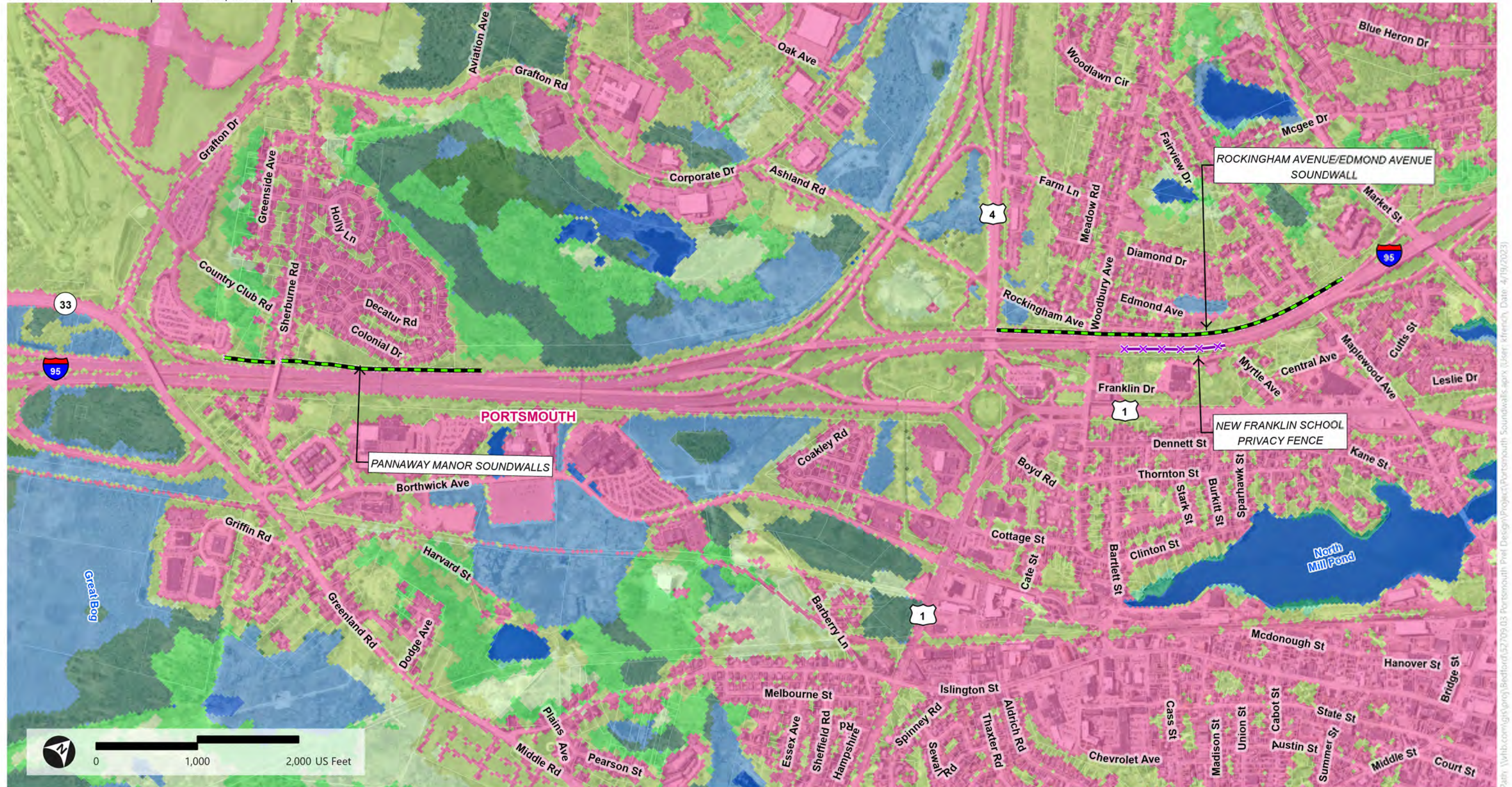


Source: NHGRANIT, NHDES, FEMA, Aerial: Nearmap 5/2/2022

Path: \\hbc\engis\proj\Bridford\32709.03\Portsmouth\Proj_Design\Project\Portsmouth_Soundwalls.mxd (User: kireney, Date: 4/19/2023)

Figure 5: NHF&G Wildlife Action Plan Habitat Type Map

Portsmouth Soundwalls | Portsmouth, New Hampshire



- | | | | |
|--------------------------|----------------------------|-------------------------|----------------------------|
| ✂ Proposed Privacy Fence | Habitat Type | 🌲 Hemlock-hardwood-pine | 🌿 Temperate swamp |
| 🚧 Proposed Soundwall | 🌳 Appalachian oak-pine | 🌲 Lowland spruce-fir | 💧 Wet meadow/shrub wetland |
| 🏠 Town Boundary | 🏠 Developed Impervious | 💧 Open water | |
| 🏠 Parcel Boundary | 🌱 Developed or Barren land | 🌱 Peatland | |
| | 🌱 Grassland | 🌱 Salt marsh | |

Source: NHGRANIT, NHDES, FEMA, Aerial: Nearnmap 5/2/2022

Path: \\hbc001gis\proj\Bredford\52709.05 Portsmouth Prel Design\Project\Portsmouth Soundwalls.aprx (user: ktrinity, Date: 4/19/2023)

Figure 6: Limit of Disturbance and Proposed Tree Clearing

Portsmouth Soundwalls | Portsmouth, New Hampshire



- Limit of Disturbance
- Parcel Boundary
- Proposed Soundwall
- Proposed Tree Clearing

Source: NHDES, NHGRANIT, Aerial: Neormap 9/29/2021

Path: \\vhb.com\gta\proj\bedford\S2709.03 Portsmouth Prel Design\Project\Portsmouth Soundwalls.aprx (User: kireich, Date: 4/7/2023)

Figure 6: Limit of Disturbance and Proposed Tree Clearing

Portsmouth Soundwalls | Portsmouth, New Hampshire



- Limit of Disturbance
- Parcel Boundary
- Proposed Soundwall
- Proposed Tree Clearing

Source: NHDES, NHGRANIT, Aerial: Nearmap 9/29/2021

Path: \\vhb.com\g\proj\Bedford\52709.03 Portsmouth Prel Design\Project\Portsmouth Soundwalls.aprx (User: kirencb, Date: 4/7/2023)

Appendix I – Environmental Field Work Memo



Memorandum

To: VHB File

Date: December 20, 2022
Project #: 52709.03

From: Kris Wilkes, NH CWS, CPESC

Re: Portsmouth 43760 - Soundwall along I-95 in Portsmouth
Environmental Field Work Technical Memorandum

In support of the State of New Hampshire Department of Transportation's (NHDOT) plans to install two soundwalls and a privacy Fence along I-95 in the City of Portsmouth (adjacent to Pannaway Manor, Rockingham Ave / Edmond Ave, and New Franklin School), as identified under the Traffic Noise Analysis by VHB under the Portsmouth, NH – Kittery, Maine 16189B project, VHB completed a field assessment for wetlands, surface waters, invasive plant species, and drainage outfalls over the course of several visits completed in late November and early December 2022.

This memorandum serves to document this work by providing the methodology of assessment; and a general description of VHB's findings in the field.

1.0 Limits of Study

VHB's environmental field work focused on three specific locations along I-95 where the privacy fences and soundwall are proposed. The study area includes State-owned property adjacent to Pannaway Manor and Rockingham Ave/Edmond Ave (immediately west of the I-95 southbound lanes), and New Franklin School (immediately east of the I-95 northbound lanes). Areas immediately surrounding the proposed fence/soundwall footprints, including existing maintained/mowed vegetation along the highway shoulder extending to the NHDOT right-of-way were reviewed. In some locations, the field assessment did not extend to the ROW limits as the proposed work would not encroach on these areas due to constructability challenges and/or existing impediments. This included the southern end of the project area adjacent to Rockingham Ave/Edmond Ave where an existing paved bike path is present, and at the northernmost extent of the project area adjacent to Pannaway Manor where the ROW significantly increases in width extending away from I-95 through undeveloped forest.

2.0 Wetlands and Surface Waters Delineation

VHB Senior Environmental Scientist, Kristopher Wilkes (NH CWS #288), delineated wetland and surface water boundaries within all three project areas on November 18 and 29, and December 2 and 6, 2022. Field delineation work was performed in accordance with the procedures and standards outlined in the *1987 Corps of Engineers Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (January 2012) using alpha-numerically coded pink flagging tape. Wetland delineation also relied upon the *Field Indicators for Identifying Hydric Soils in the United States, Version 8.2*, published by the Natural Resource Conservation Service and the *Field Indicators for Identifying Hydric Soils in New England, Version 4.0*, published by the New England Interstate Water Pollution Control Commission in June 2020. Dominant wetland vegetation was assessed using the *2018 National Wetland Plant List* published by the U.S. Army Corps of Engineers. Wetlands were classified using the USFWS methodology *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979, revised 1985). The top of bank or centerline of stream channels present were delineated in accordance with *Env-Wt 102.15* using alpha-numerically coded blue flagging tape. Additionally, the centerline of several drainage ditches within the project areas was also located at the time of field delineation. A general description of the delineated resources in terms of location, vegetative cover class, and other observations is provided below. *VHB's wetland delineation data has been provided to HTNB in CAD format to assist with their preliminary design work.*

Pannaway Manor

Three wetland areas were delineated by VHB within the northern extent of the project area associated with Pannaway Manor. These areas were identified as Wetlands W-1, W-2 and W-3. Wetland W-1 is comprised of a small, sparsely vegetated forested depression which contained leaf litter and standing water at the time of investigation. Wetland W-1 just barely intersects the limits of the NHDOT ROW and is classified as Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded (PFO1C). Wetland W-2, a larger forested wetland complex, is located approximately 65 feet to the north of Wetland W-1. Wetland W-2 extends east to the maintained/mowed road shoulder and through the existing chain link fence line in several locations and continues further north outside of the study area. Wetland W-2 is primarily classified as Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PFO1E), but transitions to Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PFO1C) where it extends through the chain link fence, just east of the existing tree line. Pockets of standing water were observed within the forested portion of Wetland W-2 at the time of delineation. Lastly, the eastern edge of scrub-shrub (PSS1C) wetland, identified as Wetland W-3, was flagged along the existing chain link fence/edge of mowed road shoulder to the north of the project area. Wetland W-3 appears to be an extension of Wetland W-2.

Rockingham Ave/Edmond Ave

One wetland, two intermittent streams, and one ephemeral channel were delineated by VHB within the northern half of the project area adjacent to Rockingham Ave/Edmond Ave. The single wetland, identified as Wetland W-4, is classified as Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated (PEM1E) and is located along the fenced edge of the NHDOT ROW to the north of the Maplewood Avenue overpass. The wetland is fed by an existing culvert at its southern end, which was observed to be partially buried and damaged. The wetland is hydrologically influenced by an abutting intermittent stream channel, which was delineated by VHB. The intermittent stream flows parallel with the NHDOT ROW fence from south to north along the eastern edge of Wetland W-4 before outletting to an existing culvert approximately 350 feet to the north. Wetland W-4 extends further west into a depression area beyond the fenced limits of the NHDOT ROW, between an existing residential house to the south and the Courtyard by Marriot to the north. Additionally, an ephemeral channel fed by groundwater breakout was delineated by VHB. This ephemeral channel flows south into the intermittent stream just prior to its intersection with the existing culvert outlet. Finally, the top of bank of one intermittent stream channel was identified in two locations along the fenced edge of the NHDOT ROW approximately 325 feet to the south of the overpass associated with Maplewood Avenue. The stream originates at a culvert headwall within the NHDOT ROW, extends west outside of the NHDOT ROW through a wetland area (that was not flagged since it was outside of the NHDOT ROW), before re-entering the NHDOT ROW and outletting to a 48" culvert with a stone headwall.

New Franklin School

Two wetlands, identified as Wetlands W-5 and W-6, were delineated within the project area adjacent to the New Franklin School. Both wetlands abut maintained school property and are located mostly outside of NHDOT ROW at the toe of a steep slope associated with I-95. Wetland W-5 is located within a depression abutting a portion of the school playground, and is classified as Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated (PEM1E). Wetland W-6



drains from north to south along the fenced NHDOT ROW edge and intermittently outlets to a ditch that flows under a small footbridge as it turns east and extends into an area of dense brush. Wetland W-5 encroaches onto the maintained/mowed edge of school property along its western side and contained standing water in central portions of the wetland at the time of delineation. Wetland W-5 contained areas of purple loosestrife (*Lythrum salicaria*), an invasive plant species. Wetland W-6 is located to the north of W-5 and is primarily classified as Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded (PSS1C). The wetland extends east to a catch basin inlet within a depressional area downslope of the existing paved school driveway. The central portion of Wetland W-6 extending toward the catch basin inlet is densely vegetated with woody shrubs, while the southern portion of the wetland intersects mowed/maintained areas associated with the school. The northern portion of the wetland is comprised of a sparsely vegetated depression containing some purple loosestrife. Wetland W-6 transitions to a forested cover type (PFO1C) where it intersects the existing NHDOT ROW fence line.

3.0 Invasive Plant Species

Concurrently with wetland delineation field work, invasive plant species were identified within all three project areas. GPS data, including general location, species, and type was collected in the field. Due to the nature of the project areas (relatively disturbed and roadside), numerous invasive plants were found including both Type 1 and Type II species. **Table 1** below provides further details on the invasive plants present.

Table 1: Invasive Plant Species Observed – Type, Species and Location

Type	Project Area		
	Pannaway Manor	Rockingham Ave/ Edmond Ave	New Franklin School
I	Glossy Buckthorn, Multiflora Rose, Autumn Olive, Oriental Bittersweet	Glossy Buckthorn, Oriental Bittersweet, Honeysuckle, Multiflora Rose, Burning Bush, Autumn Olive	Autumn Olive, Oriental Bittersweet, Multiflora Rose
II	None observed	Japanese Knotweed, Purple Loosestrife	Japanese Knotweed, Purple Loosestrife

Type I species varied in abundance and density, however, were consistently present and scattered throughout all three project areas. Type II species tended to be more clustered in dense stands, characteristic of the two plants (Japanese Knotweed and Purple Loosestrife) identified. *The location of Type I and Type II species have been provided to HTNB in CAD format to assist with their preliminary design work.*

4.0 Drainage Outfalls

During the course of field work, drainage culverts were located in the project area by GPS. Field data was then compared to NHDOT’s Web Based Stormwater Mapper (NHDOT SADES CCDS Collection). Throughout all project



Memorandum

From: Kris Wilkes
Ref: 52709.03
Page 4

areas, catch basins (storm grates) were present within the pavement edge or immediate road shoulder associated with I-95 at frequent intervals.

Pannaway Manor

Eight catch basins (storm grates) were mapped within the mowed/maintained shoulder of I-95 adjacent to the Pannaway Manor project area. The field collected data is consistent with what is mapped by NHDOT with no identified variations. No outfalls associated with this closed drainage system appear to be present within the NHDOT ROW portion of the project area.

Rockingham Ave/Edmond Ave

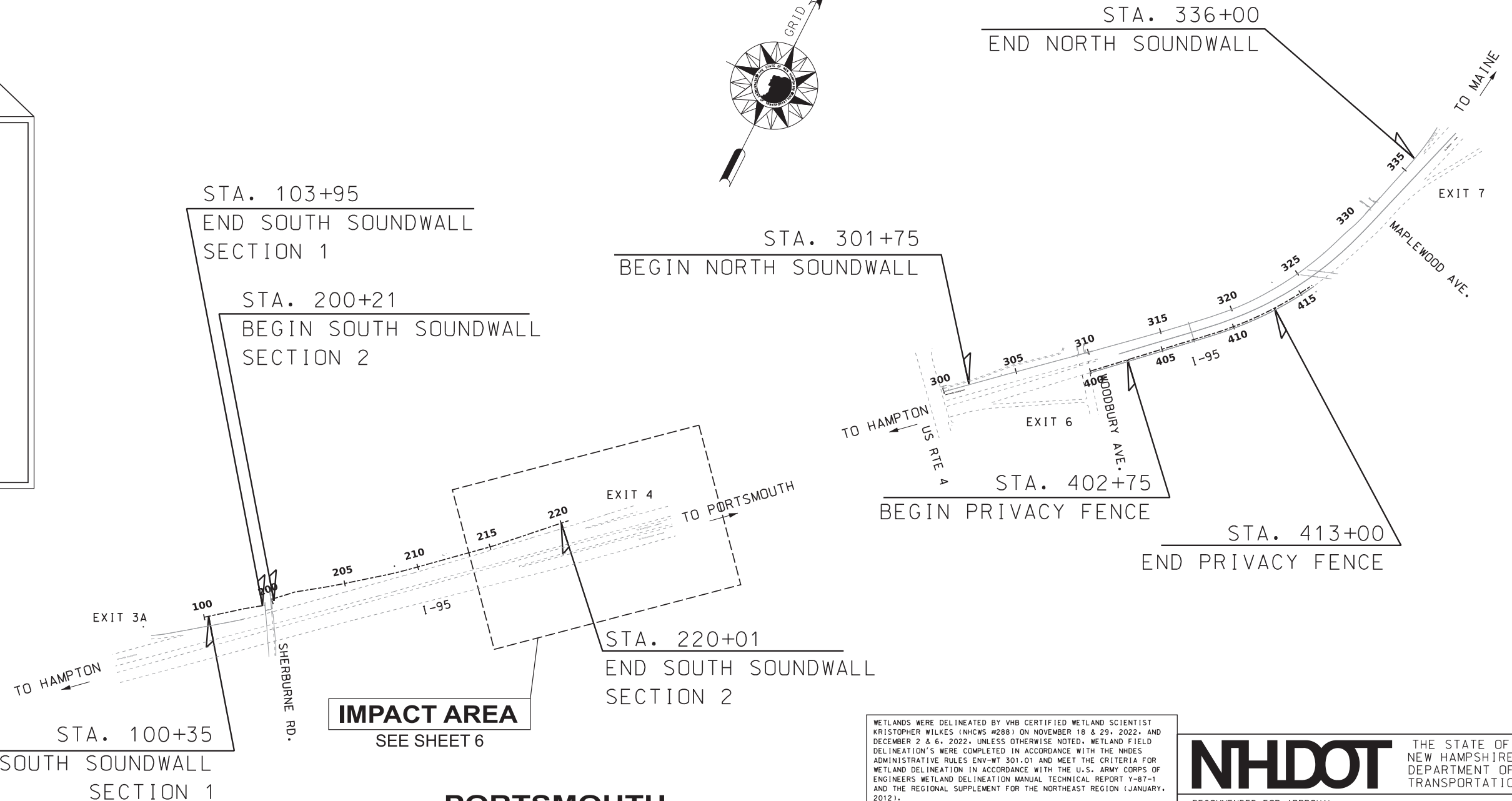
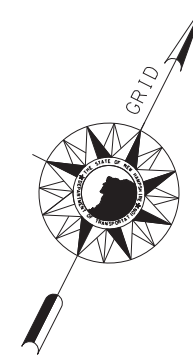
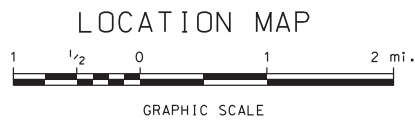
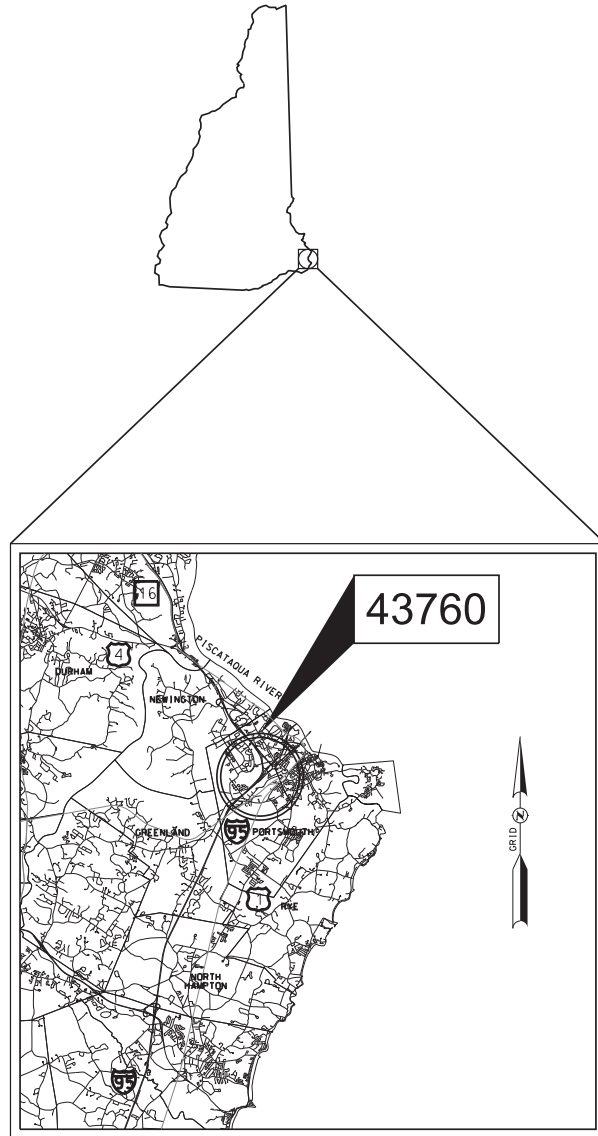
In addition to numerous catch basins identified along the pavement edge (consistent with what is depicted on the NHDOT Mapper), two culvert outlets and one culvert inlet were identified in the field along the edge of the NHDOT ROW, well downslope of the edge of pavement, between the intersection with Maplewood Avenue and the Courtyard by Marriot. Additionally, one culvert inlet and one culvert outlet were identified in the field approximately 315 feet and 410 feet to the south, respectively, of the intersection with Maplewood Avenue. These field identified drainage structures correspond with the NHDOT mapper, with the exception of the small culvert outlet pipe found at the southern end of Wetland W-4. The pipe was partially buried and size was not determined. It is possible that the pipe corresponds with neighboring residential properties instead of the closed drainage system associated with I-95. Finally, one additional culvert outlet is mapped by NHDOT at the southernmost extent of the Rockingham Ave/Edmond Ave project area just northwest of the Spaulding Turnpike overpass outside of the study area.

New Franklin School

With the exception of several catch basins along the pavement edge, no culverts were mapped within the New Franklin School project area. This corresponds with NHDOT's mapper. A single culvert was located by VHB, adjacent to the school's driveway, well downslope and outside of the NHDOT ROW.

Appendix J – Wetland Impact Plans

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
WETLAND IMPACT PLANS
INTERSTATE 95
SOUNDWALL CONSTRUCTION



IMPACT AREA
SEE SHEET 6

PORTSMOUTH
ROCKINGHAM COUNTY
SCALE: 1" = 400'

PRELIMINARY WETLAND
PLANS SUBMISSION
DATE 10/13/2023

WETLANDS WERE DELINEATED BY VHB CERTIFIED WETLAND SCIENTIST KRISTOPHER WILKES (NHCWS #288) ON NOVEMBER 18 & 29, 2022, AND DECEMBER 2 & 6, 2022, UNLESS OTHERWISE NOTED. WETLAND FIELD DELINEATION'S WERE COMPLETED IN ACCORDANCE WITH THE NHDES ADMINISTRATIVE RULES ENV-WT 301.01 AND MEET THE CRITERIA FOR WETLAND DELINEATION IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL TECHNICAL REPORT Y-87-1 AND THE REGIONAL SUPPLEMENT FOR THE NORTHEAST REGION (JANUARY, 2012).

ROADWAY PLANS PREPARED BY:

HNTB
HNTB CORPORATION
The HNTB Companies
Engineers Architects Planners
6 Loudon Road
Suite 306
Concord, NH 03301
(603) 931-3340

NHDOT THE STATE OF
NEW HAMPSHIRE
DEPARTMENT OF
TRANSPORTATION

RECOMMENDED FOR APPROVAL:

DIRECTOR OF PROJECT DEVELOPMENT DATE
APPROVED:

ASSISTANT COMMISSIONER AND CHIEF ENGINEER DATE

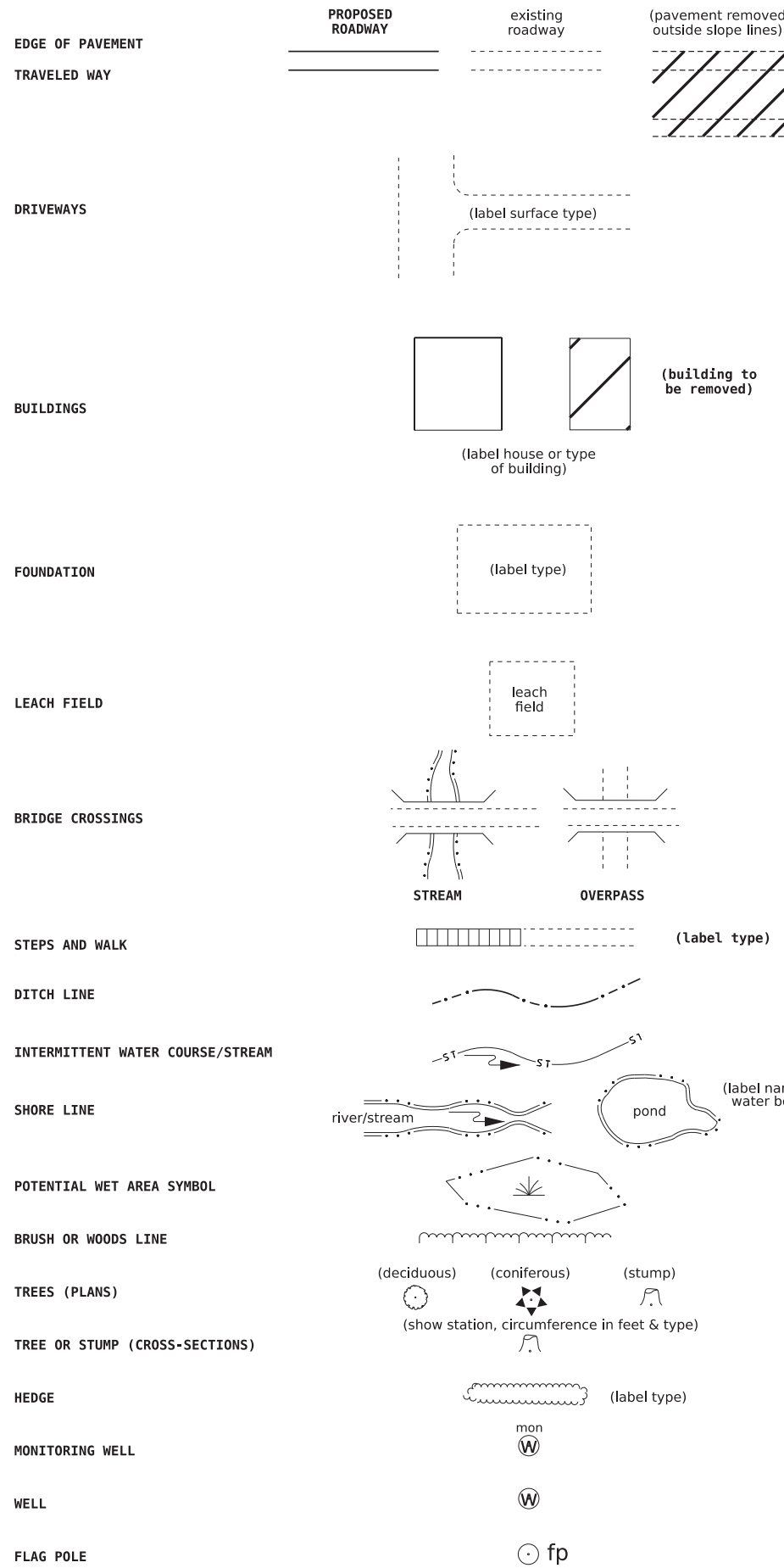
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE PAGE
2-3	STANDARD SYMBOLS
4	EROSION CONTROL STRATEGIES
5	WETLAND IMPACT SUMMARY
6	WETLAND IMPACT PLANS
7-13	EROSION CONTROL PLANS

DRAWING NAME	FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
43760-FSW		43760	1	13

DRAWN BY CDH DATE 03-2023
CHECKED BY PEK DATE 03-2023

GENERAL



ORIGINAL GROUND (TYPICALS)

ROCK OUTCROP

ROCK LINE (TYPICALS & SECTIONS ONLY)

GUARDRAIL (label type)

JERSEY BARRIER

CURB (LABEL TYPE)

STONE WALL

RETAINING WALL (LABEL TYPE)

FENCE (LABEL TYPE)

SIGNS

GAS PUMP

FUEL TANK (ABOVE GROUND)

STORAGE TANK FILLER CAP

SEPTIC TANK

GRAVE

MAILBOX

VENT PIPE

SATELLITE DISH ANTENNA

PHONE

GROUND LIGHT/LAMP POST

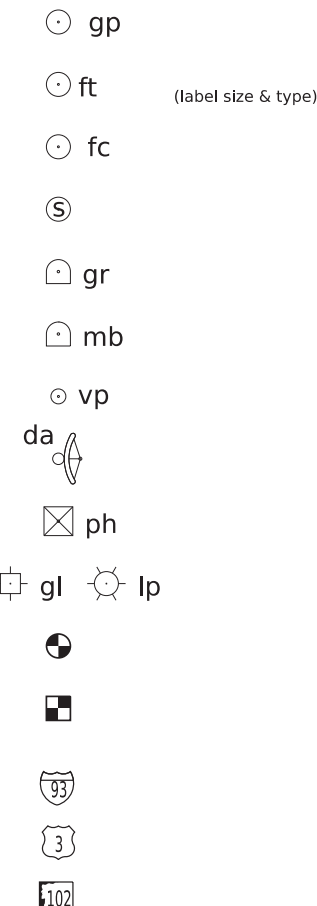
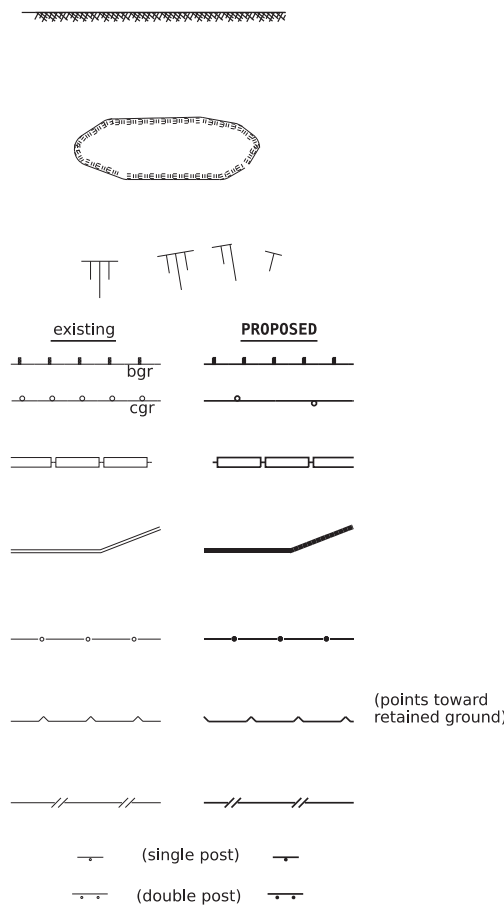
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TEST PIT

INTERSTATE NUMBERED HIGHWAY

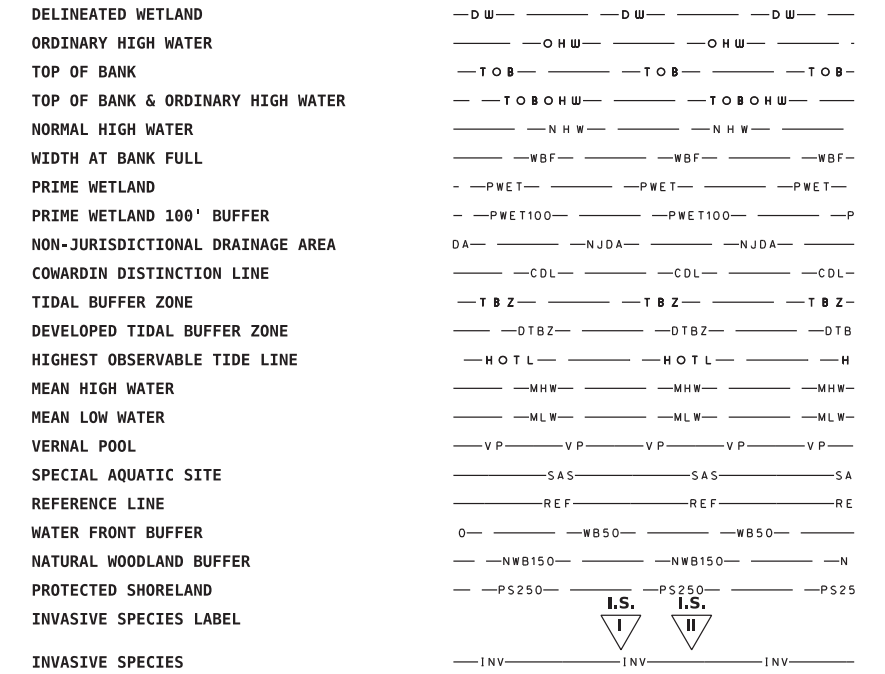
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STATE NUMBERED HIGHWAY

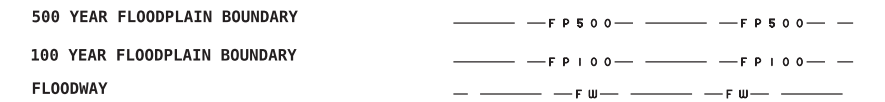


SHORELAND - WETLAND

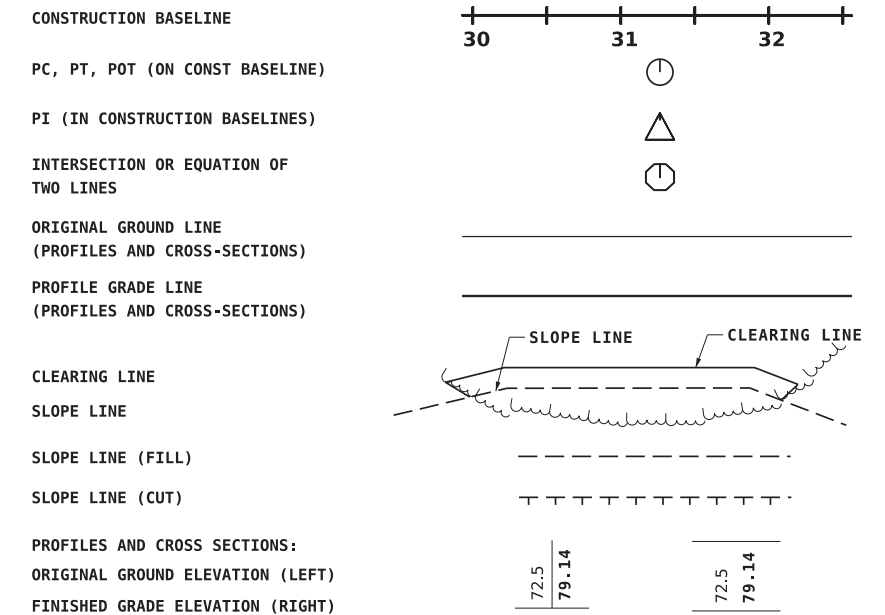
WETLAND DESIGNATION AND TYPE



FLOODPLAIN / FLOODWAY



ENGINEERING

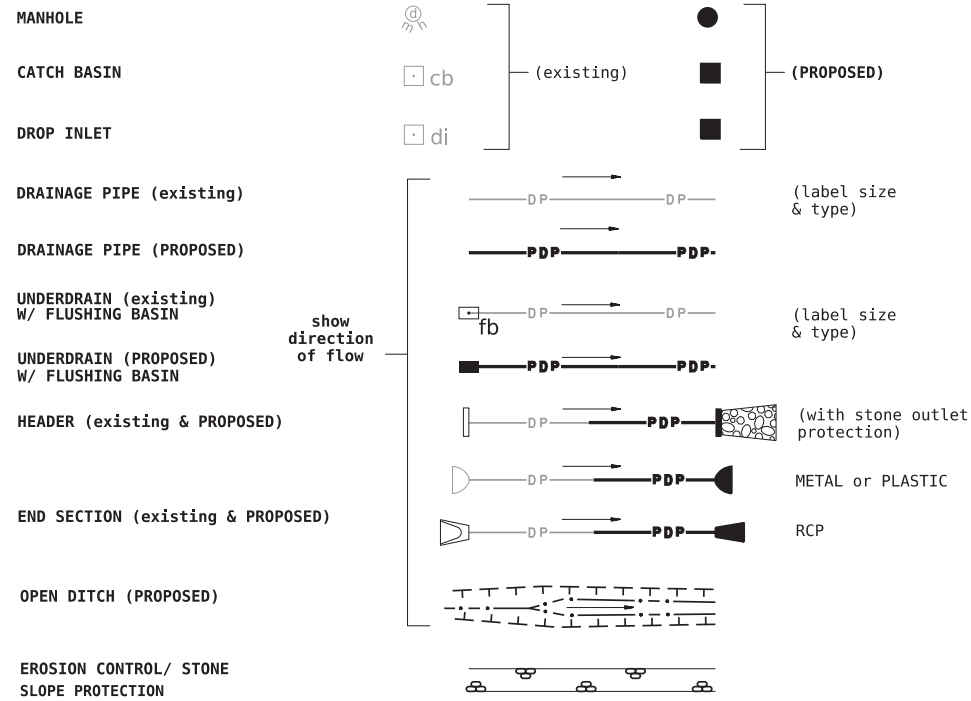


STATE OF NEW HAMPSHIRE
 PORTSMOUTH
 DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN

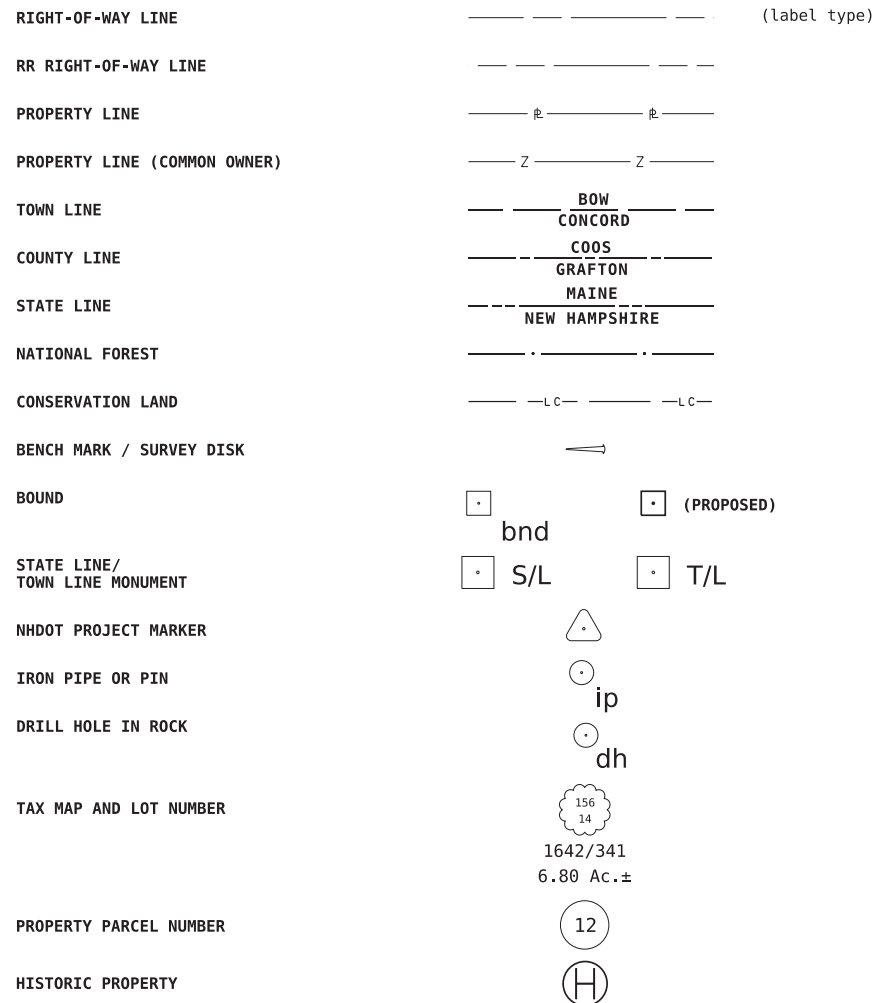
STANDARD SYMBOLS

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
07-31-2023	stdsyml-2-ce	43760	2	13

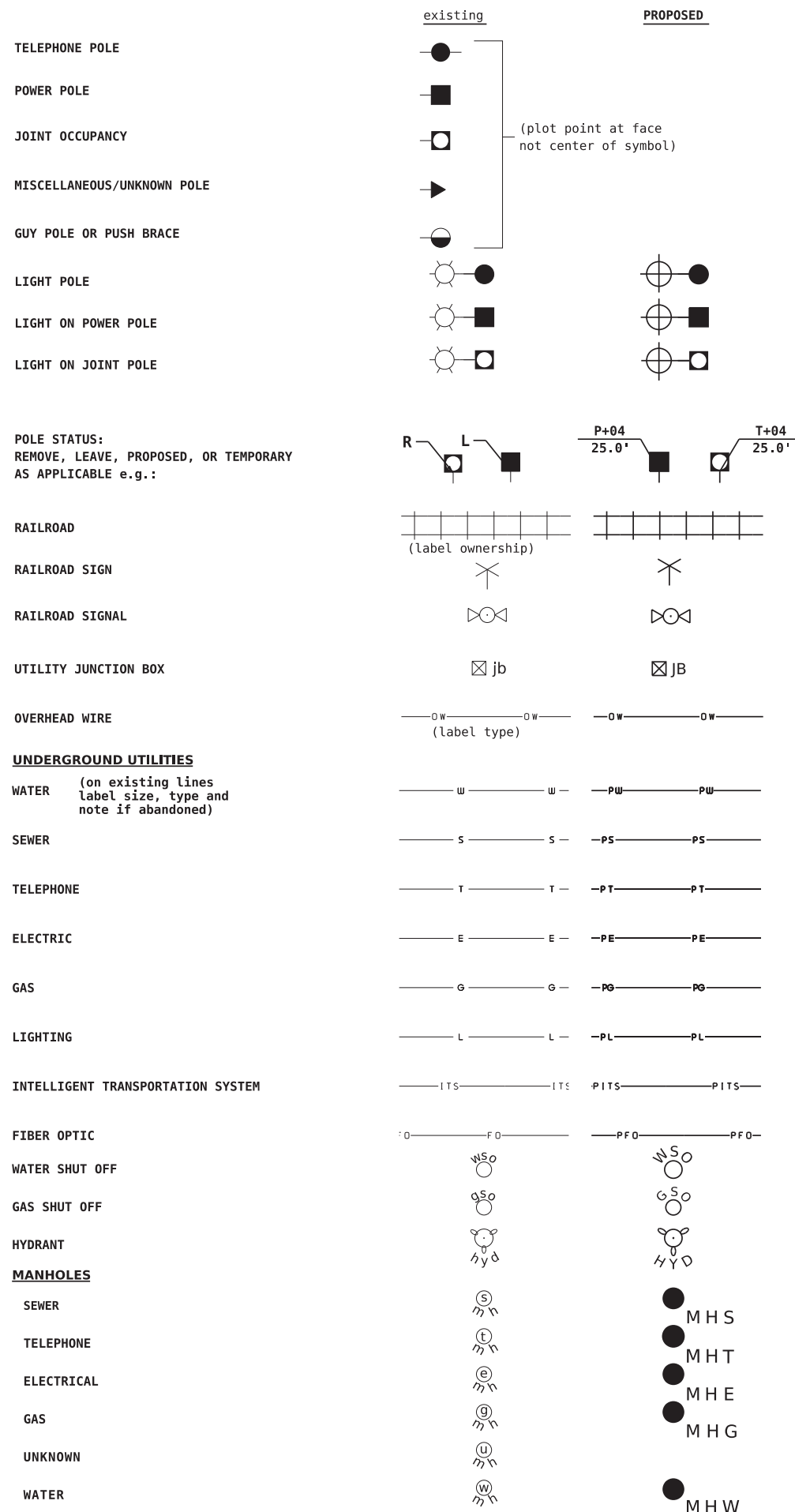
DRAINAGE



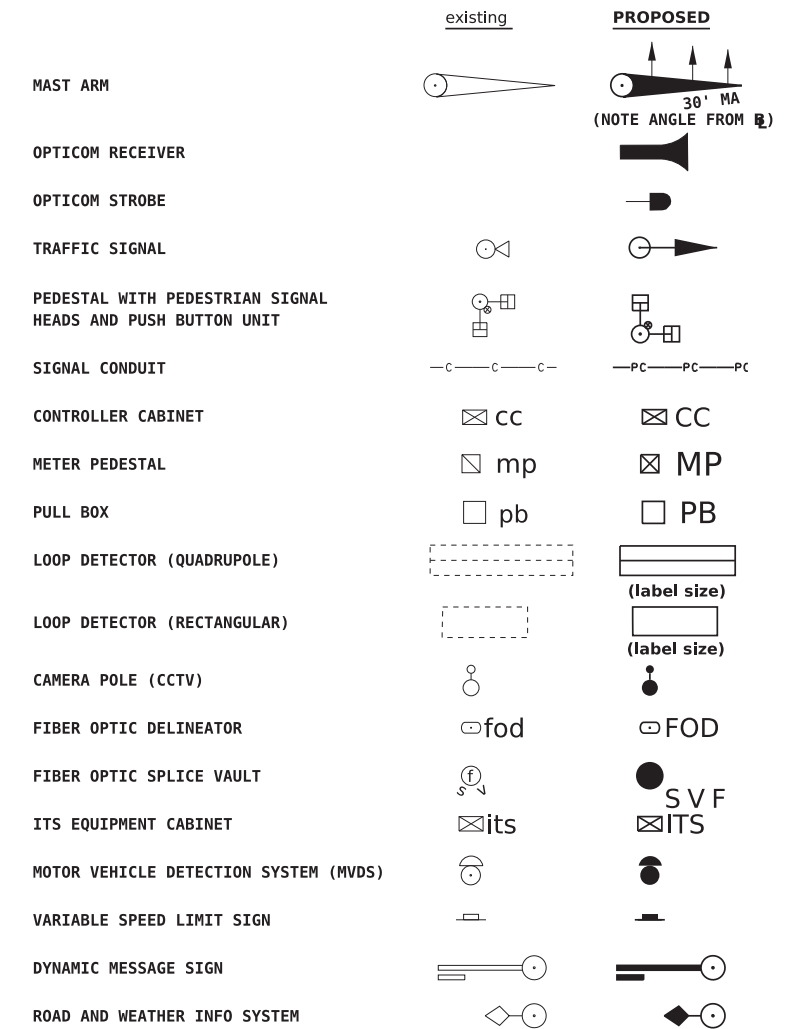
BOUNDARIES / RIGHT-OF-WAY



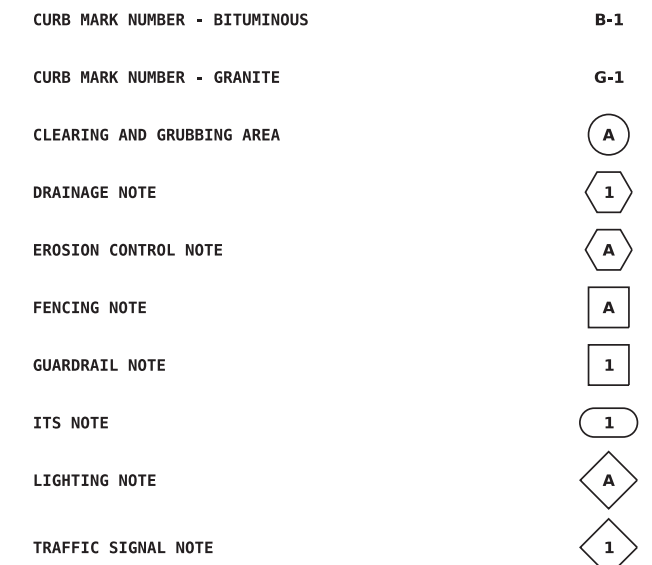
UTILITIES



TRAFFIC SIGNALS / ITS



CONSTRUCTION NOTES



STATE OF NEW HAMPSHIRE				
PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION		BUREAU OF HIGHWAY DESIGN		
STANDARD SYMBOLS				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
07-31-2023	stdsyml-2-ce	43760	3	13

EROSION CONTROL NOTES AND STRATEGIES

1. Erosion Control/Stormwater Control Selection, Sequencing and Maintenance
 - 1.1. Comply with RSA 485-A:17 Terrain Alteration.
 - 1.2. Install and maintain all erosion control/stormwater controls in accordance with the New Hampshire Stormwater Management Manual, Volume 3, Erosion and Sediment Controls During Construction, December 2008 (BMP Manual), available from the NH Department of Environmental Services (NHDES).
 - 1.3. Install erosion control/stormwater control measures prior to the start of work and in accordance with the manufacturer's recommendations.
 - 1.4. Select erosion control/stormwater control measures based on the size and nature of the project and physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to jurisdictional areas.
 - 1.5. Install perimeter controls prior to earth disturbing activities.
 - 1.6. Install stormwater treatment ponds and drainage swales before rough grading the site.
 - 1.7. Clean, replace, and augment stormwater control measures and infiltration basins as necessary to prevent sedimentation beyond project limits throughout the project duration.
 - 1.8. Inspect erosion and sediment control measures in accordance with Section 645 of the specifications, weekly, and within 24 hours (during normal work hours), of any storm event greater than 0.25 inches of rain in a 24-hour period.
 - 1.9. Contain stockpiles with temporary perimeter controls. Protect inactive soil stockpiles with soil stabilization measures (temporary erosion control seed mix and mulch, soil binder) or cover them with anchored tarps. If the stockpile is to remain undisturbed for more than 14 days, mulch the stockpile.
 - 1.10. Maintain temporary erosion and stormwater control measures in place until the area has been permanently stabilized.
 - 1.11. An area is considered stable if one of the following has occurred:
 - Base course gravels have been installed in areas to be paved;
 - A minimum of 85% vegetative growth has been established;
 - A minimum of 3" of non-erosive material such as stone or rip-rap has been installed;
 - Temporary slope stabilization has been properly installed (see Table 1).
 - 1.12. Direct runoff to temporary practices until permanent stormwater infrastructure is constructed and stabilized.
 - 1.13. Use temporary mulching, permanent mulching, temporary vegetative cover, and permanent vegetative cover to reduce the need for dust control. Use mechanical sweepers on paved surfaces where necessary to prevent dust buildup. Apply water, or other dust inhibiting agents or tackifiers.
 - 1.14. Plan activities to account for sensitive site conditions
 - Sequence construction to limit the duration and area of exposed soils.
 - Clearly flag areas to be protected in the field and provide construction barrier to prevent trafficking outside of work areas.
 - Protect and maximize existing native vegetation and natural forest buffers between construction activities and sensitive areas.
 - When work is undertaken in a flowing watercourse, implement stream flow diversion methods prior to any excavation or filling activity.
 - 1.15. Utilize storm drain inlet protection to prevent sediment from entering a storm drainage system prior to the permanent stabilization of the contributing disturbed area.
 - 1.16. Use care to ensure that sediments do not enter any existing catch basins during construction. Place temporary inlet protection at inlets in areas of soil disturbance that are subject to sedimentation.
 - 1.17. Construct, stabilize, and maintain temporary and permanent ditches in a manner that will minimize scour. Direct temporary and permanent ditches to drain to sediment basins or stormwater collection areas.
 - 1.18. Supplement channel protection measures with perimeter control measures when ditch lines occur at the bottom of long fill slopes. Install the perimeter controls on the fill slope to minimize the potential for fill slope sediment deposits in the ditch line.
 - 1.19. Divert sediment laden water away from drainage inlet structures to the extent possible.
 - 1.20. Install sediment barriers and sediment traps at drainage inlets to prevent sediment from entering the drainage system.
 - 1.21. Clean catch basins, drainage pipes, and culverts if significant sediment is deposited.
 - 1.22. Construct and stabilize dewatering/infiltration basins prior to any excavation that may require dewatering.
 - 1.23. Place and stabilize temporary sediment basins or traps at locations where concentrated flow (channels and pipes) discharge to the surrounding environment from areas of unstabilized earth disturbing activities.
 - 1.24. Stabilize, to appropriate anticipated velocities, conveyance channels or pumping systems needed to convey construction stormwater to basins and discharge locations prior to use.
 - 1.25. Size temporary sediment basins to contain the 2-year, 24 hour storm event.
 - 1.26. Size temporary sediment traps to contain 3,600 cubic feet of storage for each acre of drainage area.
 - 1.27. Construct detention basins to accommodate the 2-year, 24-hour storm event.
2. Construction Planning
 - 2.1. Divert off site runoff or clean water away from the construction activities to reduce the volume that needs to be treated on site.
 - 2.2. Divert storm runoff from upslope drainage areas away from disturbed areas, slopes and around active work areas to a stabilized outlet location.
 - 2.3. Construct impermeable barriers, as necessary, to collect or divert concentrated flows from work or disturbed areas.
 - 2.4. Locate staging areas and stockpiles outside of wetlands jurisdiction.
 - 2.5. Do not store, maintain, or repair mobile heavy equipment in wetlands, unless equipment cannot be practicably removed and secondary containment is provided.
 - 2.6. Provide a water truck to control excessive dust, at the discretion of the Contract Administrator.
3. Site Stabilization
 - 3.1. Stabilize all areas of unstabilized soil as soon as practicable, but no later than 45 days after initial disturbance.
 - 3.2. Limit unstabilized soil to a maximum of 5 acres unless documentation is provided that demonstrates that cuts and fills are such that 5 acres is unreasonable.
 - 3.3. Use erosion control seed mix in all inactive construction areas that will not be permanently seeded within two weeks of disturbance and prior to September 15th of any given year in order to achieve vegetative stabilization prior to the end of the growing season.
 - 3.4. Apply, and reapply as necessary, soil tackifiers in accordance with the manufacturer's specifications to minimize soil and mulch loss until permanent vegetation is established.
 - 3.5. Stabilize basins, ditches and swales prior to directing runoff to them.
 - 3.6. Stabilize roadway and parking areas within 72 hours of achieving finished grade.
 - 3.7. Stabilize cut and fill slopes within 72 hours of achieving finished grade.
 - 3.8. When temporarily stabilizing soils and slopes, utilize the techniques outlined in Table 1.
 - 3.9. Stabilize all areas that can be stabilized prior to opening up new areas to construction activities.
 - 3.10. Utilize Table 1 when selecting temporary soil stabilization measures.
 - 3.11. Divert off-site water through the project in an appropriate manner so as not to disturb the upstream or downstream soils, vegetation or hydrology beyond the permitted area.
 - 3.12. Install and maintain construction exits anywhere traffic leaves a construction site onto a public right-of-way.
 - 3.13. Sweep all construction related debris and soil from the adjacent paved roadways, as necessary.

4. Slope Protection
 - 4.1. Intercept and divert storm runoff from upslope drainage areas away from unprotected and newly established areas and slopes to a stabilized outlet or conveyance.
 - 4.2. Consider how groundwater seepage on cut slopes may impact slope stability and incorporate appropriate measures to minimize erosion.
 - 4.3. Convey storm water down the slope in a stabilized channel or slope drain.
 - 4.4. The outer face of the fill slope should be in a loose, ruffled condition prior to turf establishment.
5. Winter Construction
 - 5.1. To minimize erosion and sedimentation impacts, limit the extent and duration of winter excavation and earthwork activities. The maximum amount of disturbed earth shall not exceed a total of 5 acres from May 1st through November 30th, or exceed one acre during winter months, unless the contractor demonstrates to the Department that the additional area of disturbance is necessary to meet the contractor's Critical Path Method (CPM) schedule, and the contractor has adequate resources available to ensure that environmental requirements will be met.
 - 5.2. Construction performed any time between November 30th and May 1st of any year is considered winter construction. During winter construction:
 - Stabilize all proposed vegetation areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, in accordance with Table 1.
 - Stabilize all ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, in accordance with Table 1.
 - Protect incomplete road surfaces, where base course gravels have not been installed, and where work has stopped for the season after November 30th, in accordance with Table 1.
 - Unless a winter construction plan has been approved by NHDOT, conduct winter excavation and earthwork such that no more than 1 acre of the project is without stabilization any one time.
6. Wildlife Protection Measures
 - 6.1. Report all observations of threatened and endangered species on the project site to the Department's Bureau of Environment by phone at 603-271-3226 or by email at Bureau16@dot.nh.gov, indicating in the subject line the project name, number, and that a threatened/endangered species was found.
 - 6.2. Photograph the observed species and nearby elements of habitat or areas of land disturbance and provide them to the Department's Bureau of Environment at the above email address.
 - 6.3. In the event that a threatened or endangered species is observed on the project during work, the species shall not be disturbed, handled, or harmed prior to receiving direction from the Bureau of Environment.
 - 6.4. Utilize wildlife friendly erosion control methods when:
 - Erosion control blankets are used,
 - A protected species or habitat is documented,
 - The proposed work is in or adjacent to a priority resource area, and/or when specifically requested by NHB or NH&G

GUIDANCE ON SELECTING TEMPORARY SOIL STABILIZATION MEASURES
TABLE 1

APPLICATION AREAS	DRY MULCH METHODS				HYDRAULICALLY APPLIED MULCHES ²				ROLLED EROSION CONTROL BLANKETS ³			
	HMT	WC	SG	CB	HM	SMM	BFM	FRM	SNSB	DNSB	DNSCB	DNCB
SLOPES ¹												
STEEPER THAN 2:1	NO	NO	YES	NO	NO	NO	NO	YES	NO	NO	NO	YES
2:1 SLOPE	YES ¹	YES ¹	YES	YES	NO	NO	YES	YES	NO	YES	YES	YES
3:1 SLOPE	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	NO
4:1 SLOPE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
WINTER STABILIZATION	4T/AC	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES
CHANNELS												
LOW FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
HIGH FLOW CHANNELS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE	ABBREV.	STABILIZATION MEASURE
HMT	HAY MULCH & TACK	HM	HYDRAULIC MULCH	SNSB	SINGLE NET STRAW BLANKET
WC	WOOD CHIPS	SMM	STABILIZED MULCH MATRIX	DNSB	DOUBLE NET STRAW BLANKET
SG	STUMP GRINDINGS	BFM	BONDED FIBER MATRIX	DNSCB	2 NET STRAW-COCONUT BLANKET
CB	COMPOST BLANKET	FRM	FIBER REINFORCED MEDIUM	DNCB	2 NET COCONUT BLANKET

NOTES:

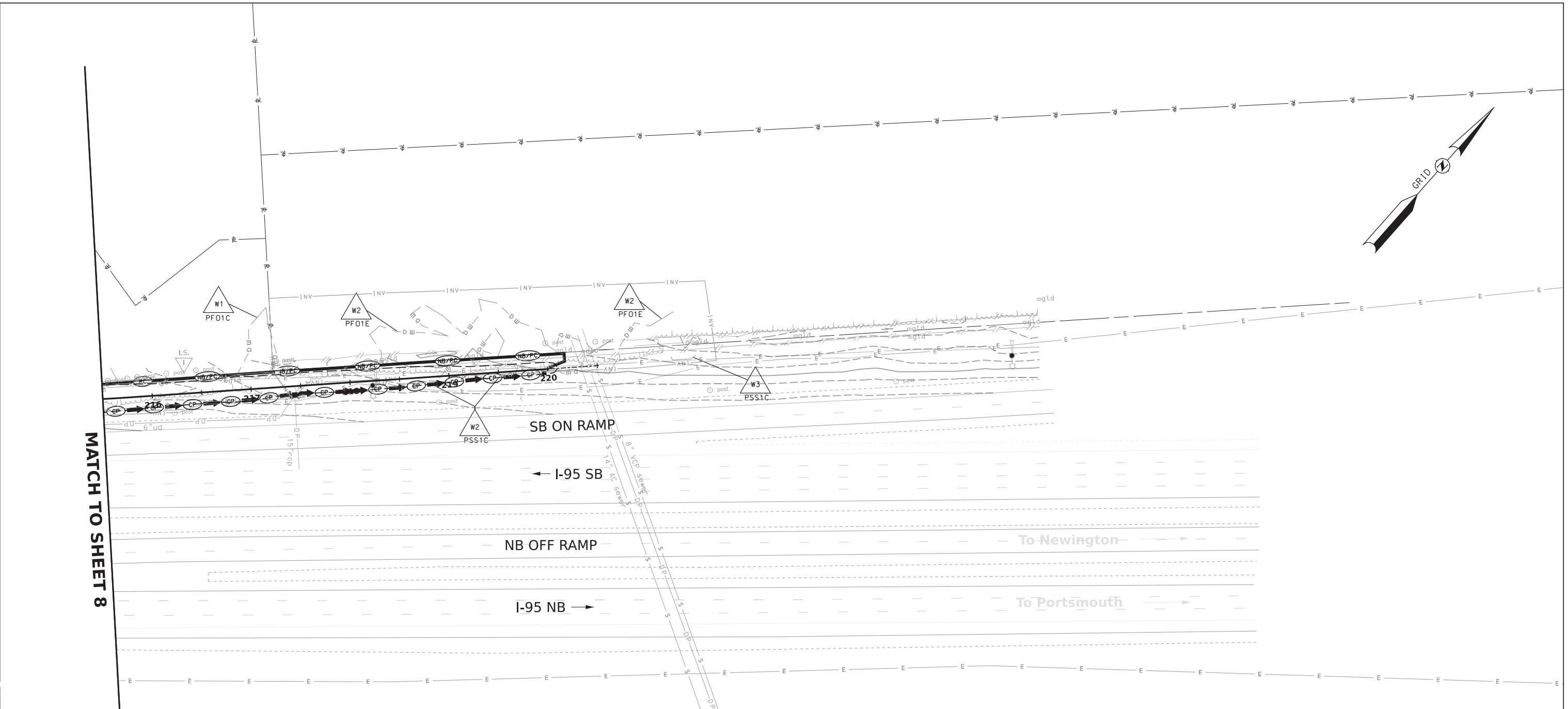
1. All slope stabilization options assume a slope length ≤ 10 times the horizontal distance component of the slope, in feet.
2. Do not apply products containing polyacrylamide (PAM) directly to, or within 100 feet of any surface water without NHDES approval.
3. Install all methods in Table 1 per the manufacturer's recommendation for time of year and steepness of slope.

STATE OF NEW HAMPSHIRE				
PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION		BUREAU OF HIGHWAY DESIGN		
 EROSION CONTROL PLANS 				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
07-31-2023	43760-Ero_Stra	43760	4	13

Appendix K – Erosion Control Plans

REVISIONS AFTER PROPOSAL		STATION	DESCRIPTION
NUMBER	DATE		

SDR PROCESSED	DATE
NEW DESIGN	10/13/2023
SHEET CHECKED	10/13/2023
AS BUILT DETAILS	



EROSION CONTROL PLAN LEGEND	
	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	STREAM DIVERSION SEE ATTACHED PLAN FOR DETAILS
	UNIMPACTED RIVERINE SURFACE WATERS NO WORK AND/OR IMPACT
	ROUTINE ROADWAY QUALIFYING ACTIVITY USE SPECIFIED CONTROL MEASURE FROM MANUAL



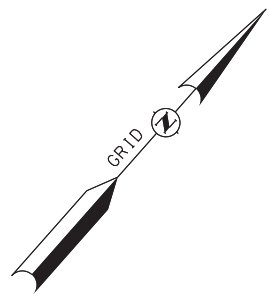
SLOPE & DRAIN & PPSE
SUBJECT TO CHANGE
DATE 10/13/2023



STATE OF NEW HAMPSHIRE PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION • BUREAU OF TURNPIKES				
EROSION CONTROL PLANS SOUTH SOUNDWALL				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
Ero_03	43760-EroPlans	43760	9	13

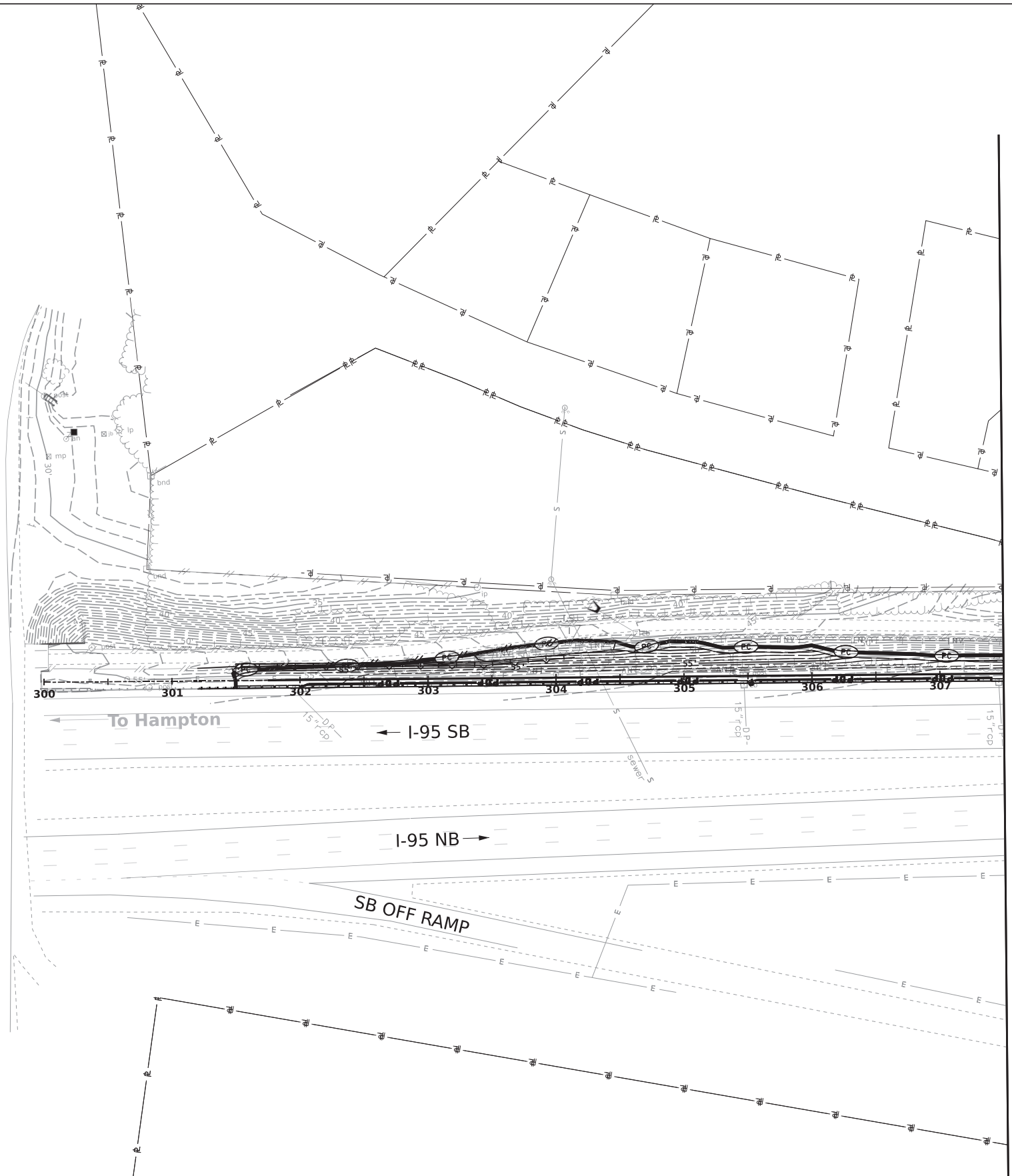
SDR PROCESSED	DATE	10/13/2023
NEW DESIGN	HNTB DESIGN TEAM	DATE
SHEET CHECKED	P. KENDALL	DATE
AS BUILT DETAILS	DATE	

REVISIONS AFTER PROPOSAL	STATION	DESCRIPTION



EROSION CONTROL PLAN LEGEND	
	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	STREAM DIVERSION SEE ATTACHED PLAN FOR DETAILS
	UNIMPACTED RIVERINE SURFACE WATERS NO WORK AND/OR IMPACT
	ROUTINE ROADWAY QUALIFYING ACTIVITY USE SPECIFIED CONTROL MEASURE FROM MANUAL

U.S. ROUTE 4



MATCH TO SHEET 11



SLOPE & DRAIN & PPSE
SUBJECT TO CHANGE
DATE 10/13/2023

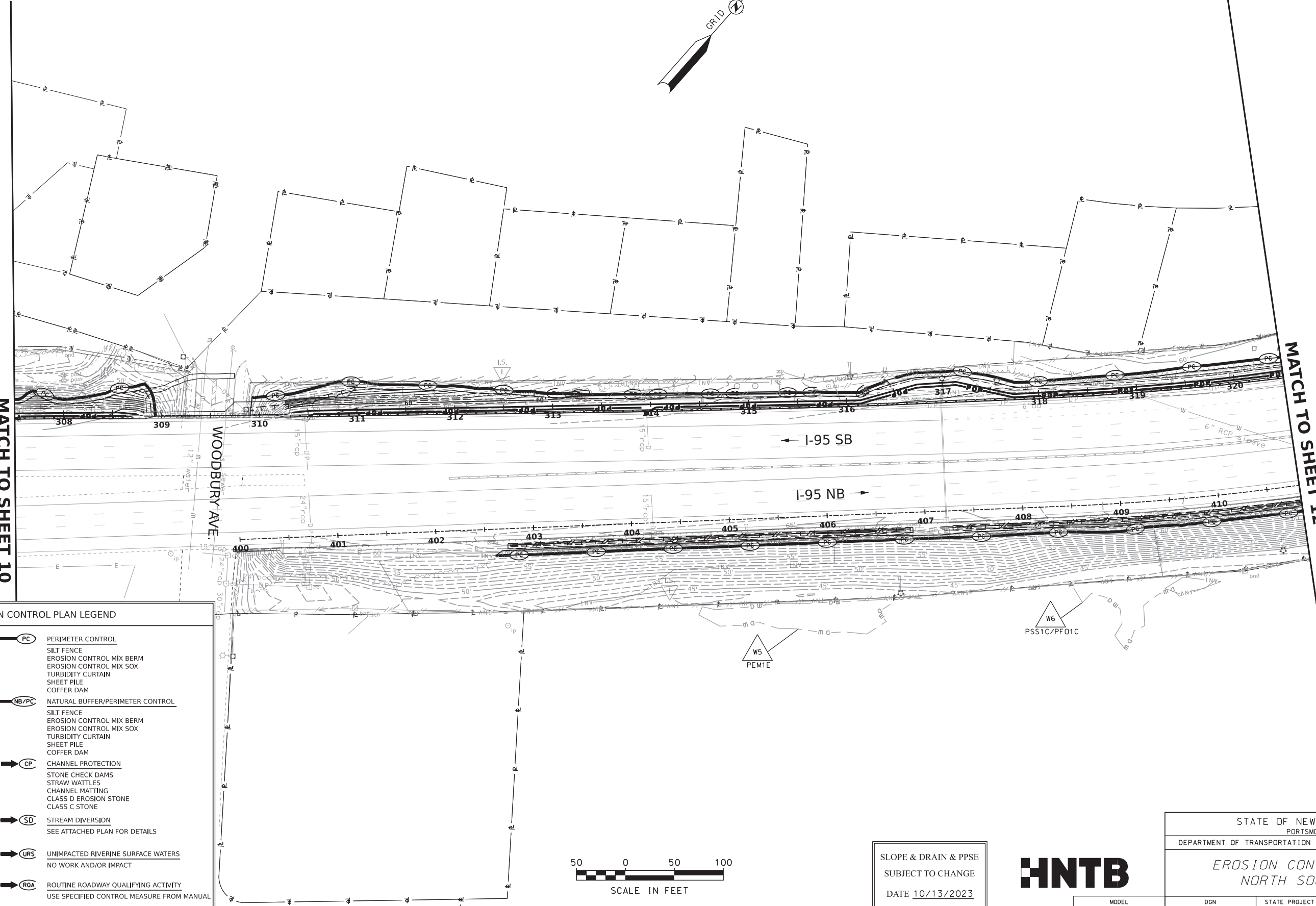
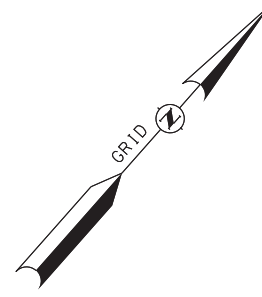


STATE OF NEW HAMPSHIRE PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION • BUREAU OF TURNPIKES				
EROSION CONTROL PLANS NORTH SOUNDWALL				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
Ero_04	43760-EroPlans	43760	10	13

SDR PROCESSED		DATE		DATE		DATE	
NEW DESIGN		DATE		DATE		DATE	
SHEET CHECKED		DATE		DATE		DATE	
AS BUILT DETAILS		DATE		DATE		DATE	
HNTB DESIGN TEAM		HNTB DESIGN TEAM		HNTB DESIGN TEAM		HNTB DESIGN TEAM	
P. KENDALL		P. KENDALL		P. KENDALL		P. KENDALL	
NUMBER	DATE	STATION	STATION	STATION	STATION	DESCRIPTION	DESCRIPTION

MATCH TO SHEET 10

MATCH TO SHEET 12



EROSION CONTROL PLAN LEGEND	
	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	STREAM DIVERSION SEE ATTACHED PLAN FOR DETAILS
	UNIMPACTED RIVERINE SURFACE WATERS NO WORK AND/OR IMPACT
	ROUTINE ROADWAY QUALIFYING ACTIVITY USE SPECIFIED CONTROL MEASURE FROM MANUAL



SLOPE & DRAIN & PPSE
SUBJECT TO CHANGE
DATE 10/13/2023

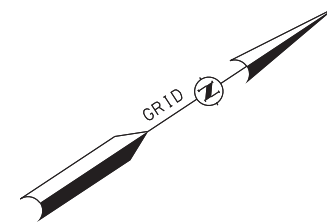
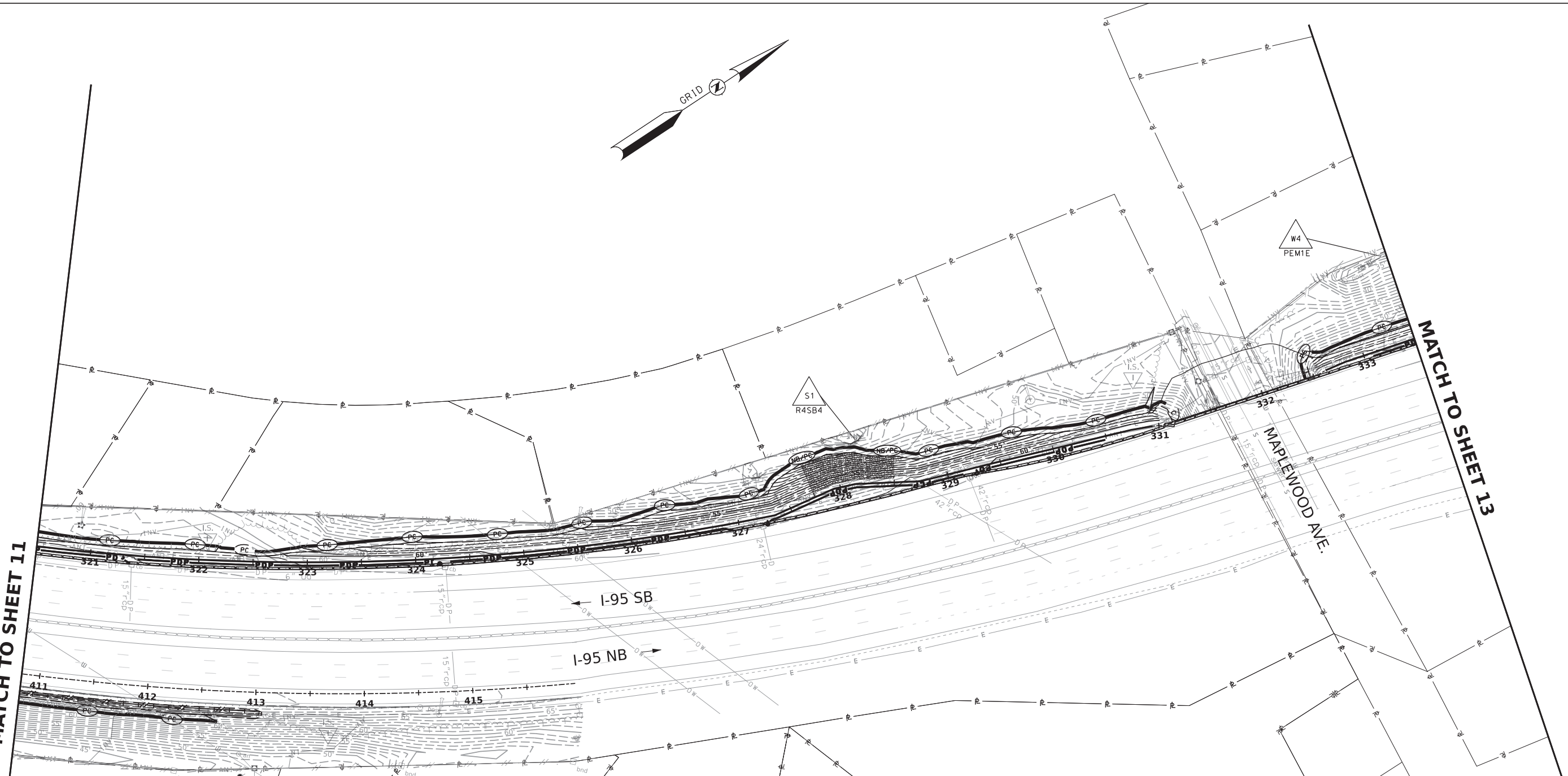


STATE OF NEW HAMPSHIRE PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION • BUREAU OF TURNPIKES				
EROSION CONTROL PLANS NORTH SOUNDWALL				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
Ero_05	43760-EroPlans	43760	11	13

SDR PROCESSED	DATE	10/13/2023
NEW DESIGN	DATE	10/13/2023
SHEET CHECKED	DATE	10/13/2023
AS BUILT DETAILS	DATE	
HNTB DESIGN TEAM	NUMBER	
P. KENDALL	DATE	
	STATION	
	STATION	
	DESCRIPTION	

MATCH TO SHEET 11

MATCH TO SHEET 13



EROSION CONTROL PLAN LEGEND	
	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	STREAM DIVERSION SEE ATTACHED PLAN FOR DETAILS
	UNIMPACTED RIVERINE SURFACE WATERS NO WORK AND/OR IMPACT
	ROUTINE ROADWAY QUALIFYING ACTIVITY USE SPECIFIED CONTROL MEASURE FROM MANUAL



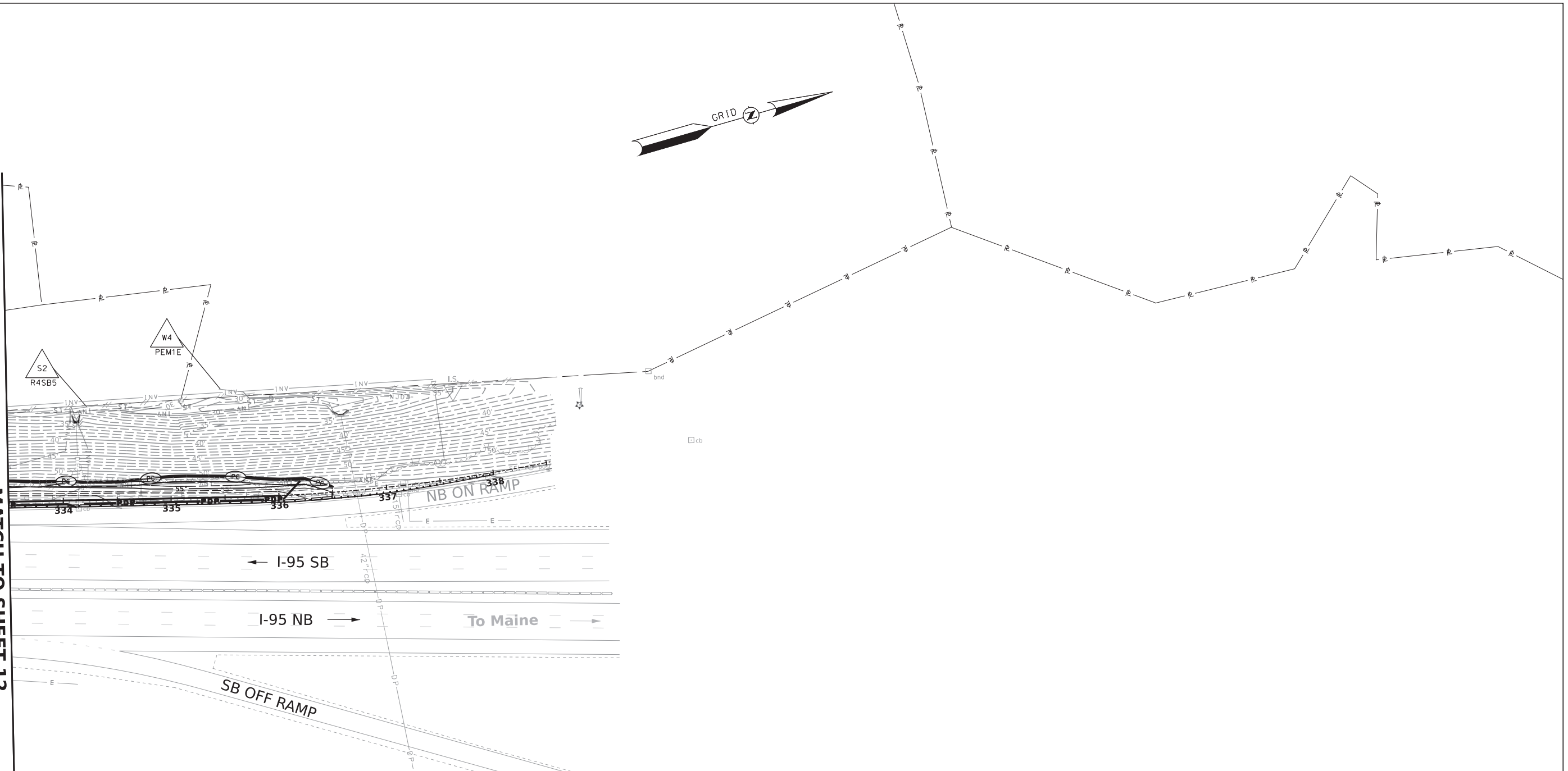
SLOPE & DRAIN & PPSE
SUBJECT TO CHANGE
DATE 10/13/2023



STATE OF NEW HAMPSHIRE PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION • BUREAU OF TURNPIKES				
EROSION CONTROL PLANS NORTH SOUNDWALL				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
Ero_06	43760-EroPlans	43760	12	13

SDR PROCESSED		DATE		DATE	
NEW DESIGN		DATE 10/13/2023		DATE 10/13/2023	
SHEET CHECKED		P. KENDALL		DATE	
AS BUILT DETAILS		DATE		DATE	
REVISIONS AFTER PROPOSAL	STATION	STATION	DATE	NUMBER	DESCRIPTION

MATCH TO SHEET 12



EROSION CONTROL PLAN LEGEND	
	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	STREAM DIVERSION SEE ATTACHED PLAN FOR DETAILS
	UNIMPACTED RIVERINE SURFACE WATERS NO WORK AND/OR IMPACT
	ROUTINE ROADWAY QUALIFYING ACTIVITY USE SPECIFIED CONTROL MEASURE FROM MANUAL



SLOPE & DRAIN & PPSE
SUBJECT TO CHANGE
DATE 10/13/2023



STATE OF NEW HAMPSHIRE PORTSMOUTH				
DEPARTMENT OF TRANSPORTATION • BUREAU OF TURNPIKES				
EROSION CONTROL PLANS NORTH SOUNDWALL				
MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
Ero_07	43760-EroPIans	43760	13	13